

PGE TSCA INSPECTION QUESTIONS  
FEBRUARY 4, 1987

STORAGE FACILITIES - FOR DISPOSAL *Sellwood*  
- FOR REUSE *Transformer shop*  
- DIELECTRIC FLUID FOR SERVICING *Transformer shop*

IF STORAGE OF BULK TANKS - LOCATION

- RECORDS OF OILS BUT IN STORAGE FOR *to property*
  - REUSE; BATCH TESTS, QUANTITY
  - DISPOSAL; BATCH TESTS, QUANTITY

- COPY OF THE SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN

*section 6  
Transformer*

CERTIFICATION NOTICES FOR TRANSFORMERS SHIPPED FOR DISPOSAL

*manifests*

MANIFESTS FOR REVIEW FROM JANUARY 1, 1984 TO PRESENT (WILL REQUEST COPIES OF EXAMPLES)

INSPECTION LOGS

- STORAGE
- TRANSFORMERS *on lines*
- OTHERS THAT RELATE TO ANNUAL REPORTS

*Rm 4, C*

#0172F

ENVIRONMENTAL PROTECTION AGENCY, REGION X  
TSCA INSPECTION CHECKLIST  
40 CFR 761 -- 1984

EPA Inspection (6/23/86)

Facility Name/Full Address Facility Representative/Title Inspection Date/Time Inspector Name/Phone

GENERAL

	YES	NO
Has facility ever manufactured PCB's or PCB items?		<input checked="" type="checkbox"/>
Are PCB's produced as a by-product of any manufacturing process?		
Are <u>&gt; 1 PCB T or &gt; 49 PCB C or &gt; 99#(42kg) PCB</u> in use or storage?	<input checked="" type="checkbox"/>	
If yes to any of the above, are records kept for all PCB's and PCB items?		
Has any PCB equip been converted to PCB-Cont or Non-PCB equip? 761.30(a)(v)	<input checked="" type="checkbox"/>	
If yes, was PCB concentration tested after 3 mos of service? Obtain results.		
Have any PCB spills occurred at the facility? Obtain details.		
Have there been any fires involving PCB Transformers?		
If yes, Date? , Who responded? , Did Transformer rupture?		
Was fire reported to National Response Center? . . . . .		
Are any combustible materials stored: Inside a PCB Transformer enclosure?		
Within 5 meters of a PCB Transformer enclosure?		
Within 5 meters of a PCB Transformer?		
Have all PCB T been registered with the Fire Department or other control authority?	<input checked="" type="checkbox"/>	

WASTE OILS (Non PCB)

Are waste oils generated, used, or stored at the facility? . . . . .	<input checked="" type="checkbox"/>	
What is the source of the waste oils?	<input checked="" type="checkbox"/>	
Are waste oils picked up by a recycler? . . . . .		<input checked="" type="checkbox"/>
Have any waste oils (50-500ppm) been shipped to a disposal facility? . . . . .		<input checked="" type="checkbox"/>
Have any waste oils (50-500ppm) been sold for fuel or burned in a high efficiency boiler? . . . . .		<input checked="" type="checkbox"/>
If yes, was EPA notified of initial burn in the HEB? 761.60(a)(2) . . . . .		<input checked="" type="checkbox"/>
Are waste oils used or sold for: Road Oil , Dust Control , Rust Prevention , Sealants , Pesticide/Herbicide Carriers ? 761.20(d)		<input checked="" type="checkbox"/>
(Waste oils can't be used for these purposes unless tested and found to be PCB free)		
Are waste oils tested for PCB concentration? 761.60(g) . . . . .	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Are bulk storage tanks used for waste oils? (>55 gal DOT drum specs)	<input checked="" type="checkbox"/>	
Is an SPCC plan available for PCB-Contaminated bulk storage tanks?	<input checked="" type="checkbox"/>	
Are bulk storage tanks labeled? (Must label if PCB concentration is unknown or > 50ppm.)		
Are in-out records (date/amt) available for bulk storage? 761.65(c)(8)		
Have PCB fluids (> 500 ppm) ever been added to bulk storage tanks?		
Have PCB Contam fluids (50-500 ppm) ever been added to < 50 ppm PCB bulk storage tanks?		

STORAGE FOR DISPOSAL 761.65

Is there a designated Storage for Disposal Area (SFD)?	<input checked="" type="checkbox"/>	
Marked with 6x6 M <sub>L</sub> label? 761.65(b)(3) . . . . .		
Roofed?		
Is rain prevented from reaching PCB's or PCB items? . . . . .		
Adequate walls provided?		
Minimum 6" curbs provided around SFD? . . . . .		
Floor constructed of smooth, impervious materials?		
Any drains or expansion joints present in the floor? . . . . .		
Any sewer drains or sumps located in the SFD?		
Is containment volume adequate?		
(At least 2x internal volume of the largest PCB article/container or 25% of the total internal volume of all PCB articles or containers in storage.)		
Is the SFD above the 100-yr flood water elevation?	<input checked="" type="checkbox"/>	
Are any PCB's or PCB items stored within the SFD? Itemize-obtain inventory		
Are items dated when placed into SFD?		
Are items checked monthly for leaks?		
Are items marked with M <sub>L</sub> ?		
Are any PCB Transformers in SFD? How many?		
Are any PCB Transformers declared "for disposal" stored outside of the SFD?		
Are any PCB-Cont Elec Equip or PCB Cap declared "for disposal" stored outside the SFD?		
If yes: 1. Is space = 10% of the volume of the Contaminated Trans available in the SFD?		
2. Are weekly inspections for leaks performed?		
Is a Temporary Storage Area (TSA) being used for PCB items? 761.65(c)	<input checked="" type="checkbox"/>	
Are items Dated? Marked?		
Is the 30 day temporary storage limit observed?		
Are PCB containers in TSA containing PCB's between 50 and 500 ppm covered by an SPCC plan?		
Are containers in TSA marked with M <sub>L</sub> and date removed from service?		
Are liquids in containers < 500 ppm?		
If yes, are containers marked < 500 ppm PCB?		
(Temporary storage is not allowed for PCB liquids (> 500 ppm)		
Are PCB liquids (>500ppm) stored anywhere other than the SFD area?		
Have any PCB's or PCB items been shipped to a disposal facility within the last 5 years?		
Are shipping papers/manifests available for shipments?		

## TRANSFORMERS Use Conditions 761.30(a)(1)

YES NO

- Does company own or maintain any PCB transformers located in a Food/Feed facility? 91. ☒
- If yes, are weekly inspections made? By whom? ☐
- Are inspection records available? Obtain copies. ☐
- NOTE: PCB transformers are PROHIBITED in a Food/Feed Facility after OCTOBER 1, 1985.
- Are any PCB Transformers ( > 500 ppm) in use? ☐
- How many: PCB Transformers \_\_\_\_\_, Non-PCB Transformers \_\_\_\_\_, PCB Contaminated Trans \_\_\_\_\_
- Are all PCB Transformers labeled with 6x6 M<sub>L</sub>? ☐
- Are exteriors of PCB T vaults/enclosures (excluding grates & manhole covers) marked with M<sub>L</sub>? ☐
- Do all transformers have nameplates or documentation specifying the type of dielectric fluid? 12. ☒
- Are PCB Transformers serviced on site? (Examine area) 11. ☐
- How are PCB Transformers serviced? ☐
- Are PCB contaminated rags or other wastes generated by servicing placed into drums in the SFD? ☐
- Are PCB's removed from the Transformer during servicing? ☐
- If yes, are PCB's put back into the Transformer or placed into the SFD? ☒
- Are PCB Transformer coils removed during servicing? (Prohibited) ☒
- Are PCB liquids ( > 500 ppm) stored on site for servicing PCB Transformers? (Must be in SFD) ☒
- Are PCB concentration testing records available for transformers? 12. ☒
- Are service records available for PCB transformers? ☐
- Were any leaking PCB Transformers observed at the facility? (Get serial numbers, location) 13. ☒
- Is clean-up of leaks initiated within 48 hours of discovery? ☐
- Are daily checks of active leaks and drip pans made until leak is repaired? ☐
- Are Quarterly inspections made (start 8-10-81) of PCB Transformers? ☐
- Are records of Quarterly inspections maintained for at least 3 years after disposal? ☐
- Do Quarterly PCB-Transformer inspection records include? ☐

Location? ☐

Inspection date? ☐

Inspector's Name or Initials? ☐

Date leak discovered? ☐

Location of leak? ☐

Estimate of amount PCB released? ☐

Date of cleanup? ☐

containment? ☐

repair? ☐

Description of cleanup? ☒

- Annual inspections may be performed in lieu of Quarterly if: 761.30(a)(1)(v)
1. Secondary containment of 100% of the capacity of the Trans is provided or
  2. PCB conc of the Trans is < 60,000ppm, 90 days after servicing to reduce the PCB conc.

## CAPACITORS 761.30(L)-Use Conditions

- Are any PCB-Capacitors in use or in storage at facility? How many? ☒
- Are >49 LHV/LLV C (3# PCB; or >200 in<sup>3</sup>; or >100 but <200 in<sup>3</sup> and >9# tot wt) in use/stor? ☐
- If yes, are these capacitors included in the Annual Report? ☐
- Are Capacitors marked with M<sub>L</sub> 6x6? ☐
- (LHVC in service need to be marked)
- Has facility ever had > 49 LHV/LLV C in use or storage within the last 5 years? ☐
- If yes, are annual reports on file for years when > 49 Capacitors were in use or storage? ☐
- Have any Capacitors been removed from service? ☐
- If yes, have Capacitors been individually labeled with M<sub>L</sub>? ☐
- Note: LLVC (<2000 volts) in service do not need M<sub>L</sub>.
- LLVC (<2000 volts) must be labeled upon removal from service.
- Are all Capacitors equipped with nameplates specifying type of dielectric fluid? 14. ☒
- (Capacitors without nameplates must be assumed to be PCB Capacitors.)
- Are any PCB C owned or maintained by the company located in a Food or Feed Facility (FFF)? 15. ☐
- (These must be removed as of 10-1-88.)
- Are any Capacitors manufactured after 7-1-78 in use at the facility? ☒
- If yes, are these Capacitors marked "No PCB's" if they contain none? ☐
- Were any leaking Capacitors observed during the inspection? ☐
- Note: Use of PCB Capacitors after 10/1/88 is prohibited except for:
1. Restricted Access and Contained Indoor Installation
  2. Restricted Access Substation

## ANNUAL REPORT 761.180(a)

- Is an AR available for July-December 1978? (Note to Inspector: Review of all back records) ☒
- Are AR available for CY 1979-1985? (need not be completed if previous compliance) ☐
- (inspection has been completed for the facility) ☐
- (and record violations were cited.) ☐

- Are Annual Reports kept for 5 years? ☐
- Are all PCB Transformers removed from service itemized in AR? ☐
- Is the total weight (kg) of PCB's contained in these transformers shown? ☐
- Date removed from service? ☐
- Date placed into storage? ☐
- Date placed into transport for disposal? ☐
- Is number of PCB Trans and total wt (kg) of PCB's remaining in service at year end shown? ☐

## ANNUAL REPORT (continued)

- Are LHV/LLV PCB Capacitors removed from service itemized in annual report?  
 Date removed from service?  
 Date placed into storage?  
 Date placed into transport for disposal?  
 Is the number of PCB LHV/LLV Capacitors remaining in service at year end shown?  
 Is the number of containers of PCB liquids in the SFD area shown?  
 Is the weight (kg) of these PCB liquids also shown?  
 Are PCB items in containers listed?  
 Date container placed into storage shown?  
 Date container placed into transport for disposal shown?  
 Are names/locations of disposal/storage facilities for PCB shipments shown?  
 Have any intermediate storage/disposal areas been used for PCB items earmarked for disposal?

## SPECIAL QUESTIONS

- Are any Dairylike or Phthalocyanin pigments in use or storage? 761.30(g)  
 Is any PCB mining equip used or located at facility? 761.30(c)  
 Are any Railroad Trans in use or located at facility? 761.30(b)  
 Was PCB conc measured after service or within 12-24 mo after PCB conc was reduced?  
 Are records kept of service, testing, use, storage, and disposal? (Must keep until 1-1-91)  
 Are any heat transfer systems containing PCB's in use? 761.30(d)  
 Are annual tests for PCB concentration made? Date of last test?  
 Have any annual tests shown PCB concentration to be > 50ppm?  
 If yes, has system been drained and refilled with < 50ppm PCB fluid?  
 Are these annual testing records kept for 5 years?  
 Are Electromagnets containing PCB's in use or storage at the facility? How many?  
 Have Electromagnets been tested for PCB concentration?  
 Are any PCB Electromagnets (> 500ppm PCB) in use or storage at the facility? How many?  
 NOTE: Non-PCB fluid may be used to top-off Electromagnets. (Removal of Internals prohibited)  
 Are Hydraulic systems containing PCB's in use? 761.30(e)  
 Has annual testing for PCB concentration been performed since 11/01/79?  
 NOTE: Annual tests are not required after PCB concentration reaches < 50ppm.  
 Have any annual tests shown PCB concentration to be > 50ppm?  
 If yes, has system been drained and refilled within 6 mos of test with < 50ppm PCB fluid?  
 Was exemption obtained from EPA for use of hydraulic fluid containing > 50ppm PCB?  
 NOTE: Hydraulic Systems containing > 50 ppm PCB are PROHIBITED after 7/1/84.

## COMMERCIAL BUILDING REGULATIONS

- Is there a commercial building located on company property?  
 Are any PCB Transformers located inside or within 30 meters of the Commercial Building?  
 If yes, how many? Where located?  
 Who owns the PCB Transformers?  
 If owned by utility, are PCB Transformers registered with the building owner?  
 If owned by the building owner, are PCB Transformers registered with fire department?  
 Are PCB Transformers: Radial? Network? High Secondary Voltage 480V? Low secondary voltage?  
 Do LSV Network and HSV Radial PCB T in/near the Commercial Bldg have enhanced elect protect?  
 Current-limiting fuses? Overcurrent protective relays? Circuit Breakers?  
 Heat or Ultraviolet sensors? Pressure sensors? Fluid Level Sensor?  
 Are exteriors of PCB Transformers locations (excluding grates & manhole covers) marked with M?

## INSPECTION PROCEDURES

- Were Inspector's credentials presented?  
 Was "Notice of Inspection" presented?  
 Was "TSCA Inspection Confidentiality Notice" presented?  
 Were photographs taken?  
 Were samples taken during the inspection?  
 Was a "Receipt for Samples" given to the facility representative?  
 Were Chain of Custody procedures followed for samples?  
 Were samples offered to the facility?  
 Were samples given to the facility?

Was warrant required?

Reason for inspection: Neutral Scheme  
 complaint  
 Informant  
 Agency Referral  
 Follow-up  
 Second Follow-up

## EPA INSPECTION SUMMARY

An inspection was conducted on February 5, 6, and 7, 1987 by Bruce Long, EPA Region 10, to determine compliance status with the Toxic Substances Control Act. The following observations were made during the inspection.

### CENTRAL STORES

- I. Annual reports.
  - A. Reports do not specify the location of the storage or disposal facility.
  - B. Clarify that the quantity under PCB In Containers represents the total weight of material contaminated with PCB. A reference should also be included as to the spill location.
  - C. Reports contain removed-from-service dates and other notations in the supporting documentation. This terminology was discussed so that Bruce Long understood that these dates are not the designation for disposal dates which start the storage for disposal and disposal time periods.
  - D. Documents are to be kept four or five years after the facilities are no longer used for disposal.
- II. Several barrels were stored in the Storeroom 62 receiving area that contained filters from EM&C transformer oil filter trucks. These materials were being stored pending receipt of a waste profile sheet approval form from Chem Securities. Bruce Long suggested that since test data is not available and it is known that the filters contain PCB, a PCB label and date be put on the barrels.
- III. Copies of nine Report of Failed Capacitor or Transformer Containing PCBs were taken by Bruce Long. The following problems were noted.
  - A. Date placed in storage was missing.
  - B. Time in temporary storage exceeded 30 days.
  - C. Transformers containing over 500 ppm PCB were temporarily stored in areas not meeting PCB storage criteria.
- IV. Bruce Long provided a list of 13 transformers located in food and feed areas and requested PCB concentrations. This information was not available from the computer or the Analytical Lab. Therefore, indications are that these transformers have not been tested.

## SELLWOOD SUBSTATION

- I. Some capacitors in storage did not appear to be labeled. They were banded together on a pallet. Bruce Long did not request that the banding be taken off. These items were described as being in-store stock.
- II. Regulator R272 on a capacitor bank was observed to be leaking. However, it was labeled non-PCB and no sample was taken.
- III. Storage for disposal area.
  - A. Nine transformers were marked with PCB content with over 500 ppm but did not have labels.
  - B. A barrel containing potential transformers had no date or label. Bruce Long was told that they were being checked to see if they contained liquid and possibly PCBs.
  - C. Two barrels of unknown material were being stored that had a 1/30/87 sample taken date. The contents of these barrels should be documented since the barrels originally could have contained flammable materials as indicated by the Shell Oil name.

## EM&C

- I. PCB transformer quarterly inspection reports for 1985, 1986, and 1987 were reviewed. The 1985 third quarter inspection reports for Sycan, Fort Rock, and Sand Springs were not available. These inspections were conducted on October 3 and 4, which fall into the fourth quarter. During 1985 four inspections were conducted at all sites except Sycan, which was not accessible because of snow.

## STATION L

- I. Bruce Long requested verification of how long the residual PCB material from the Sun Ohio oil processing of PCB-contaminated oil was stored on site. He was given copies of hazardous waste manifests.
- II. Hauling of PCB-contaminated material to Chem Securities for disposal in trucks used for other purposes was reviewed. The trucks are not tested because the disposal material is completely enclosed in plastic and disposed of without coming into contact with the truck.
- III. The January 28, 1986 oil spill cleanup in the tank farm was noted, including labels and barriers. Water near the drain which leads to the river was observed to have a very slight sheen. The water was not being drained at the time; however, absorbent pads were located on top of the drain to ensure that no sheen would be released into the river.

- IV. The oil storage tank was labeled; however, a date when the first material was put into the tank was not on the label. This information was obtained from the log. Bruce Long was given copies of the tank log.

#### EQUIPMENT STORAGE YARD

- I. Regulator No. 30234 had both PCB and PCB-contaminated labels.
- II. Transformer No. 10160 had an oil stain indicating a leak.
- III. Bruce Long requested the PCB content for the two previous pieces of equipment and circuit breaker No. 20227. These pieces of equipment all contained less than 50 ppm PCB.
- IV. Several pieces of equipment were marked with an "X" and "junk". It was explained that this did not constitute designation for disposal since the equipment could be sold for reuse.

#### TRANSFORMER SHOP

- I. The date of designation for disposal was defined as the date when both electrical and PCB tests were completed and the determination made that it will not be reused. Bruce Long noted a bullet hole in the top of transformer No. 19537, and he was told that the above definition still applied.
- II. Two vary old transformers were noted in the yard which did not have PGE numbers. They had not been tested yet, but they were both oil filled (Allis Chalmers No. 2298942, Kuhlman No. 946754).

#### ENVIRONMENTAL SCIENCES

- I. Letters of notification concerning PCB transformers in or near buildings were reviewed.
- II. Oil spill report documentation was reviewed for the following sites:
- A. McLary Road, 12/12/85.
- B. Station L, 4/30/86.
- C. Bell Street, 5/22/86.
- D. Southeast 145th, 6/1/86.
- E. Oregonian, 6/30/86.
- F. Hiawatha, 11/24/86.

#### CLOSING COMMENTS

- I. Greater than 500 ppm PCB material can only be stored in an area meeting storage for disposal requirements.
- II. Dates designating disposal of equipment should be clearly identifiable.
- III. Drums and transformers in storage for disposal area did not have PCB labels.
- IV. Storage containers for oil to be reclaimed should be dated when the initial contents are put in.
- V. EPA will clarify whether storage for disposal criteria should be applied to areas containing recyclable material.

## EPA TSCA Compliance Inspection Potential Violations

1. Barrels stored in Storeroom 62 containing filters used to clean PCB contaminated oil were unlabeled. Contents untested however material will be sent to Chem Securities. Barrels should have a PCB label.
2. Report of Railed Capacitor or Transformer Containing PCB:
  - 2 missing date placed into storage (4910, 5673)
  - 2 time in temporary storage exceeded 30 days (6081, 6082)
  - 6 transformers containing over 500 ppm temporarily stored in areas not meeting PCB storage criteria (6081, 6082, 4741, 6094, 6098, 6088)
  - Copies of the above documents were taken by EPA
  - 6081 & 6082 should not receive violations in both categories
3. Quarterly PCB Transformer inspection reports
  - Reports for Sycan, Fort Rock & Sand Springs not available for 3rd quarter 1985

#### 4. Selwood Storage for Disposal

- Nine PCB transformers not labeled
- Barrel of Potential Transformers unlabeled
- Two barrels of unknown material in storage area

#### 5. Station L

- Storage tank had label but no date showing when material was initially put in
- 3 pieces of equipment were leaking oil, however they are under 50 ppm PCB



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

SEP 30 1987

REPLY TO  
ATTN OF: SO-125

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Robert Short, Chief Executive Officer  
Portland General Electric Company  
121 S.W. Salmon  
Portland, Oregon 97204

Re: Toxic Substances Control Act  
Docket No. 1087-09-19-2615

Dear Mr. Short:

Enclosed you will find a Complaint and Notice of Opportunity for Hearing. A copy of the regulations and Rules of Practice applicable to this proceeding are also enclosed. You are hereby advised to read this document carefully and communicate your answer within the time limit specified.

The Complaint alleges that your company, Portland General Electric Company (PGE), violated the recordkeeping, use authorizations, marking, storage, and disposal provisions of the PCB Regulations issued pursuant to the Toxic Substances Control Act. Accordingly, it is of considerable importance that you attend to this matter forthwith.

As well as the violations cited in the complaint, the inspector noted additional circumstances that require your attention:

Recordkeeping

PGE's PCB recordkeeping system appears to be seriously deficient. Several practices observed during the inspection have the high likelihood of causing major errors in PGE's PCB tracking and compliance program.

- 1) EPA's inspector discovered that Failure Reports, the chief instrument for tracking individual pieces of equipment removed from service, are filed only by the date that the equipment is sent for permanent disposal. Without some system of cross-referencing, it is impossible to check an item's disposition unless the disposal date is known.
- 2) Several of the items and containers located in PGE's designated storage for disposal facility did not appear on the facility's log or on Failure Reports. Some of these were apparently slated for disposal, but others were stored for reuse, or unidentified. While a small business operation might be able to

RECEIVED  
OCT 5 1987  
ROBERT H. SHORT, Chairman  
WILLIAM J. LINDBLAD, PRESIDENT

*Copies to  
Management Comte  
K. Davis  
F. Lamoureux*

keep track of material kept in a multipurpose storage area, the presence of such a mix in PGE's storage for disposal area almost guarantees that recordkeeping errors will occur. The failure to provide a dependable link between stored items and log entries can also lead to problems like the one cited in Violation 11--items that appear in the log but are nowhere to be found in the storage facility itself.

- 3) Apparently, PGE routinely stores items temporarily at other locations beside the designated storage facility. Such temporary storage is allowed for certain items under specified conditions, but PGE does not keep records on this temporary storage. The complaint notes temporary storage violations that occurred at Central Stores (Violations 7 and 9). Without some means of providing accountability for temporary storage, other violations are likely to occur.
- 4) The inspector was unable to obtain information on PCBs generated at the Faraday Hydroelectric Plant and the Oak Grove, Oregon City, and Sullivan Yards. While it is acceptable for these facilities to maintain records separately, the fact that many of PGE's PCB activities are centralized may lead to confusion on the part of the operators of individual facilities, and subsequent commission of violations.
- 5) The inspector noted that PGE was unable to identify with confidence the location and status of in-service equipment. (A transformer observed in use at Newberg just before the inspection was placed by PGE's inventory system in Oregon City in stock.) While the PCB regulations do not require that facilities submit lists of their inventories to EPA, the lack of such a complete, verified inventory makes it nearly impossible for a facility to comply with some aspects of the regulations including the Fire Rule (Violation 4).
- 6) The inspector reviewed quarterly inspection logs maintained at the Hawthorne Building for in-service PCB Transformers; while the log checklist provides that leaks are to be noted, the responses to leaks are documented in separate cleanup reports which are not kept at the Hawthorne Building. Documentation of response to leaks is a requirement of quarterly inspections. These separate cleanup reports must be maintained with and as a part of the quarterly inspections.

### Marking

The inspector reported that equipment brought in for servicing is routinely tested for PCB content partly because identifications and labeling by field personnel have been found to be unreliable. PGE must take immediate steps to assure that Non-PCB labels are not being

applied to equipment that has not been verified as containing less than 50 ppm PCB. The improper application of a Non-PCB label is far worse than leaving a piece of equipment unmarked completely. An unmarked piece of equipment will at least be treated cautiously by servicing personnel or even the general public as being an unknown, but a false label can inspire unwarranted confidence. Knowing application of false labels constitutes a criminal offense. Please note also that: 1) the regulatory designation of non-PCB equipment (less than 50 ppm PCB) is not necessarily the same as the identification of equipment as containing no PCBs (less than 2 ppm PCB), and 2) most uses of PCB oil in the range of 2-50 ppm---including recycling or burning---are effectively regulated, prohibited, or restricted.

\*

#### Transformer Yard Storage Area

EPA's inspector was told that transformers in storage at the shop are not initially inspected because they are considered to be in-use until they are either serviced or designated for disposal. This is an extremely risky omission for PGE. While PCB-contaminated equipment in service does not require quarterly inspections like PCB Transformers, PGE is still liable for disposal violations if such equipment leaks. It is our experience that areas of stored electrical equipment almost invariably include leaking items; in fact, the most commonly cited PCB disposal violations are those which occur in such areas. If a stored, leaking transformer is also discovered to contain over 500 ppm PCB, the facility may be liable for a quarterly inspection violation as well as a disposal violation.

#### L-Yard Storage Area

Representatives of PGE requested that EPA provide to them a written statement on what we consider to be the regulatory status or classification of the bulk storage area at the L-Yard. We understand that PGE uses the large storage tanks there to accumulate oils contaminated with PCBs for decontamination, and that PGE does not consider this a storage for disposal area but a recycling operation. This is not a correct designation. While the oil matrix will be reused, the PCBs contained in the oil are slated for the termination of their useful life through the decontamination process. The oil stored here may be recycled, but the PCBs are in storage for disposal. Thus, we consider this area to be a storage for disposal area, and subject to all the associated regulatory requirements. The PCB Regulations concerning storage for disposal [40 CFR 761.65(c)(7)] provide that containers, such as bulk storage tanks, used for the storage of PCBs may be larger than those identified in the regulations as meeting DOT specifications if certain conditions are met. These conditions, requiring equivalent design strength and the preparation of a Spill Prevention Control and Countermeasure (SPCC) plan, are designed to take the place of the roof, walls, and

see long thought that  
a BULK TSD Permit  
did not agree

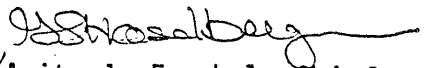
Test 1/1  
10/1/80

containment criteria specified for a designated storage for disposal facility (EPA Headquarters policy interpretation). The regulations additionally require the maintenance of batch records for such larger containers.

You are allowed twenty (20) days to formally answer the complaint unless you request and receive a written extension of time. However, we would like to informally discuss the alleged violations and proposed penalties. Such discussions may result in settlement which would make the filing of a formal answer unnecessary.

David Dabroski, Attorney, is knowledgeable about this subject and can be reached at (206) 442-1476.

Sincerely,

  
for Anita J. Frankel, Chief  
Pesticides and Toxic Substances Branch

Enclosures

cc: John A. Foley, EPA Headquarters

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 10, 1200 Sixth Avenue, SO-125  
Seattle, Washington 98101

THE UNITED STATES ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Complainant,	)	NO. 1087-09-19-2615
vs.	)	
	)	
Portland General Electric Company	)	NOTICE OF LEGAL PROCEEDINGS;
	)	NOTICE OF EPA COMPLAINT; AND
	)	NOTICE OF OPPORTUNITY FOR
Respondent(s).	)	HEARING, AND FOR SETTLEMENT
	)	MEETING

---

THE REGIONAL ADMINISTRATOR EPA REGION 10 TO THE FOLLOWING RESPONDENT:

Portland General Electric Company

121 S.W. Salmon

Portland, Oregon 97204

YOU ARE HEREBY GIVEN NOTICE AS FOLLOWS:

1. Administrative proceedings have been commenced against you by the U.S. Environmental Protection Agency ("EPA").

2. You are hereby NOTIFIED of, and served with, the ATTACHED TRUE COPY of a COMPLAINT filed in these proceedings. It explains EPA's claims for civil penalties proposed to be adjudged against you.

3. The signed original of the attached COMPLAINT is filed with the EPA Regional Hearing Clerk, SO-125, Park Place Bldg., 1200 Sixth Avenue, Seattle, King County, Washington, 98101, Phone No. (206) 442-1141.

4. The ATTACHED COMPLAINT is a claim by EPA for civil penalties to be assessed against you. Adjudicative proceedings to that end are controlled by the "Consolidated Rules of Practice" (copy attached to the Complaint) appearing in Title 40, Code of Federal Regulations, Part 22.

5. You have a RIGHT TO A HEARING BEFORE AN ADMINISTRATIVE LAW JUDGE:

A. To contest any material allegation of the attached penalty COMPLAINT which you genuinely deny; and/or

B. To contest the amount and appropriateness of the civil penalties proposed in the COMPLAINT.

However, TO OBTAIN A HEARING YOU MUST FILE A WRITTEN RESPONSE to the COMPLAINT called an "Answer."

6. YOU HAVE ONLY TWENTY (20) CALENDAR DAYS (if you choose to respond) from the day you receive this Notice within which to file a WRITTEN RESPONSE to the attached COMPLAINT. Such a written response or "Answer" must be filed by having it DELIVERED ON TIME to the EPA Hearing Clerk (address in paragraph 3). Copies of all papers filed by you must be delivered at the same time (by mail or otherwise) to the EPA attorney whose name appears below in paragraph 10.

7. ANY SUCH WRITTEN RESPONSE YOU FILE TO THE COMPLAINT MUST:

A. Request a hearing on the Complaint (or your right to request a hearing on the Complaint is deemed waived); and

B. Contain clear and direct admissions, denials, and/or explanations with respect to each of the allegations of the Complaint; and

C. Contain a definite statement of any facts which you contend constitute grounds for defense against the penalty liability stated in the Complaint; and

D. Contain a concise statement of all material facts relating to allegations in the Complaint which you intend to place in issue at a hearing.

8. IF YOU FILE A LATE WRITTEN RESPONSE, OR IF YOU OMIT ENTIRELY FILING ANY WRITTEN RESPONSE, YOU ARE SUBJECT TO THE ENTRY OF AN ORDER OF DEFAULT on the Complaint. After an order of default, penalties can be adjudged and imposed on you without any further notice to you.

9. AN INFORMAL SETTLEMENT MEETING can be held at your request. You may discuss there:

A. Whether or not the violations alleged truly occurred; and/or

B. The amount and appropriateness of any civil penalty considering: the size of your business, the gravity of any such violations, the effect of civil penalties on your ability to continue in business, and any other appropriate factors.

Such a meeting might resolve matters by a settlement which would make a hearing unnecessary.

10. In order to arrange an informal settlement meeting you must contact the following EPA attorney at (206) 442-1476, 1200 Sixth Avenue SO-125, Seattle, Washington 98101: David Dabroski, not later than twenty (20) calendar days from receipt hereof.

11. PLEASE TAKE NOTICE that an EXTENSION OF TIME to make and file your written response may be negotiated with the EPA attorney named above. If an agreement is reached to extend time, a written stipulation and an agreed order will be entered in accordance with 40 C.F.R. §22.16(c).

ISSUED AT SEATTLE this 30<sup>th</sup> day of September, 1987.

  
61/ANITA J. FRANKEL, Chief  
Pesticides and Toxic Substances Branch

1  
2  
3  
4  
5  
6  
7  
8 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
9 BEFORE THE REGIONAL ADMINISTRATOR  
10 Region 10  
11 Seattle, Washington

12 In the Matter of:

13 Portland General Electric Company,

14 Respondent.

DOCKET NO. 1087-09-19-2615

COMPLAINT

15 I.

16 JURISDICTION

17 1. This is an administrative action instituted pursuant to  
18 Section 16(a) of the Toxic Substances Control Act (hereinafter "TSCA"), 15  
19 U.S.C. §2615(a), for the assessment of a civil penalty. The complainant is  
20 Region 10, United States Environmental Protection Agency (hereinafter  
21 "EPA"). Complainant has reason to believe that the above-named respondent  
22 has violated Federal regulations addressing the use and/or disposal of  
23 polychlorinated biphenyls (PCBs) (40 C.F.R. Part 761 promulgated under  
24 Section 6 of TSCA), and thereby has violated Section 15 of TSCA, 15 U.S.C.  
25 §2614.  
26  
27  
28

II.

FINDINGS AND VIOLATIONS

2. On February 4-6, 1987, an EPA inspection was performed at facilities of Portland General Electric Company. The purpose of the inspection was to determine compliance with the TSCA, 15 U.S.C. §2601, et seq., and specifically the PCB regulations pursuant to 40 C.F.R. Part 761. The inspection disclosed the following violations:

3. Regulation - Records & Monitoring

40 C.F.R. 761.180(a) requires that, beginning July 2, 1978, facilities using or storing at one time at least 45 kilograms (99.4 pounds) of PCBs contained in PCB Container(s), or one or more PCB Transformers, or 50 or more PCB Large High or Low Voltage Capacitors, develop and maintain records on the disposition of the PCBs and PCB Items. The records shall form the basis of an annual document prepared by July 1, covering the previous calendar year. The annual document shall include:

1) a) The dates when PCBs and PCB Items are:

i) removed from service,

ii) placed into storage for disposal,

iii) placed into transport for disposal;

b) the quantities of PCBs and PCB Items removed from service including:

i) total weight in kilograms of PCBs contained in PCB

Containers, with the identification of content in the containers,

- 1                   ii) total number of PCB Transformers and total weight in  
2                   kilograms of PCBs contained in the transformers,  
3                   iii) total number of PCB Large High or Low Voltage Capacitors;  
4                   c) the location of the initial disposal or storage facility for  
5                   PCBs and PCB Items removed from service;
- 6                   2) Total quantities of PCBs and PCB Items remaining in service at the  
7                   end of the calendar year, including:
- 8                   a) total weight in kilograms of any PCBs and PCB Items in PCB  
9                   Containers, with the identification of content in the  
10                   container,  
11                   b) total number of PCB Transformers and total weight in kilograms  
12                   of PCBs in the transformers,  
13                   c) total number of PCB Large High or Low Voltage Capacitors.

14                   4. Violation One

15                   An examination of the annual reports of 1982, 1983, and 1984  
16                   revealed inaccuracies in the numbers of PCB Transformers reported removed and  
17                   remaining in service.

18                   ~~5.~~ Violation Two

19                   The 1985 annual report showed a discrepancy between the month  
20                   (September) that material was placed into storage for disposal, and the month  
21                   (October) that the material was removed from service.

22  
23                   6. Regulation - Use Authorizations (Quarterly Inspections)

24                   40 C.F.R. 761.30(a)(1)(ix)(x)(xii) requires that owners of PCB  
25                   Transformers in use or stored for reuse:

- 26                   a) visually inspect each PCB Transformer at least once every  
27                   three months;

- 1           b) record all leaks and initiate cleanup within 48 hours of a  
2           leak's being observed; and  
3           c) maintain records of the inspections and servicing history.

4       The use of PCB Transformers, as outlined in 40 C.F.R. Part 761, is allowed  
5       only if the persons using that equipment comply with these steps.  
6

7           7. Regulation - Use Authorizations (Annual Inspections)

8           40 C.F.R. 761.30(a)(1)(xiii) allows a reduced visual inspection  
9       frequency of once every twelve months only if containment equaling 100% of  
10      the liquid volume in the transformer is present, or if the transformer has  
11      been tested and found to contain less than 60,000 ppm PCB.

12       *Review*   8. Violation Three

13           The quarterly inspection report records for PCB Transformers were  
14      not complete. Some substation reports were missing for certain quarters.  
15      Inspection reports for some PCB Transformers were missing altogether.  
16

17           9. Regulation - Use Authorizations (Fire Rule)

18           40 C.F.R. 761.30(a)(1)(vi)(vii) requires that all PCB Transformers  
19      in use or stored for reuse be registered with local fire response  
20      authorities. PCB Transformers located in or near commercial buildings must  
21      be registered with the building owners.  
22

23       10. Violation Four

24           PGE's annual report for 1985 noted 63 PCB Transformers in service.  
25      However, the inspector was only shown 10 letters of notification to fire  
26      districts, and these letters did not clearly correlate with all of the 63  
27      in-service PCB Transformers.

11. Regulation - Use Authorizations (Reclassification)

40 C.F.R. 761.30(a)(2)(v) provides that PCB Transformers may be reclassified as PCB-contaminated Transformers, and that PCB-contaminated Transformers may be reclassified as Non-PCB Transformers if:

- 1) the transformer is drained and then retrofilled with lower concentration dielectric fluid,
- 2) the transformer is placed in-service (or an approved simulation) for a minimum of three months, and
- 3) the transformer is confirmed by subsequent testing to meet the under-500 ppm or under-50 ppm classification requirement.

12. Violation Five

Up to the date of the EPA inspection, PGE routinely tested and retrofilled transformers that came into its transformer shop, but did not track and retest the retrofilled transformers after three months of use. PGE's procedure of immediate reclassification of electrical equipment upon servicing did not comply with the regulatory requirements. Equipment reclassified under this system was incorrectly marked and recorded.

13. Regulation - Marking

40 C.F.R. 761.40 requires that all PCB Containers, PCB Transformers, Large PCB Capacitors, and PCB storage for disposal areas be marked in accordance with 40 C.F.R. 761.45. In general, a 6 inch by 6 inch PCB label is required, although the label may be reduced in size proportionately to a minimum of 2 inches by 2 inches for equipment too small to accommodate the standard 6 inch by 6 inch label.

*Reduce in size*

14. Violation Six

The inspector noted the following unmarked items in PGE's storage for disposal area: 50-60 PCB capacitors, four drained PCB Transformers, six undrained PCB Transformers, three covered 55-gallons drums, and a potential transformer inside an open 55-gallon drum.

*Reduce size*

15. Violation Seven

PCB-contaminated material in temporary storage at the Central Stores area was contained in eight unmarked 55-gallon drums. The area where the drums were stored was also unmarked.

*20 lbs/barrel*

16. Regulation - Storage (Dating)

40 C.F.R. 761.65(c)(8) requires that PCB Articles and PCB Containers be dated on the articles or containers when they are placed in storage.

17. Violation Eight

Three covered 55-gallon drums and a potential transformer inside an open 55-gallon drum, located in the storage for disposal facility, were not dated with the date they were placed into storage.

18. Regulation - Storage

40 C.F.R. 761.65(b) requires that any facility used for the storage of PCBs and PCB Items designated for disposal have:

- 1) adequate walls and roof to prevent rainwater from reaching the stored PCBs and PCB Items;
- 2) adequate floor constructed of continuous smooth and impervious materials with a continuous curbing a minimum six inches high;
- and

- 1                   3) no drain valves, floor drains and other openings that would  
2                   permit liquids to flow from curbed area.

3       40 C.F.R. 761.65(c) allows temporary storage for certain items in an area  
4       that does not comply with the requirements of 761.65(b) for up to thirty days  
5       from the date of their removal from service provided that:

- 6                   1) a notation is attached indicating the date the item was  
7                   removed from service,  
8                   2) stored items and articles are not leaking, or if leaking are  
9                   properly containerized with absorbent, and  
10                  3) a Spill Prevention, Control, and Countermeasure plan has been  
11                   prepared for any area used for the temporary storage of  
12                   liquids containing less than 500 ppm PCBs. (Temporary storage  
13                   is not allowed for PCB liquids at concentrations of 500 ppm or  
14                   greater.)

15       19. Violation Nine

16       Drums in temporary storage at Central Stores were not dated with  
17       the date their contents were removed from service.

18  
19       20. Regulation - Disposal (Items in Storage)

20       40 C.F.R. 761.65(c)(5) requires that all PCB Articles and  
21       Containers in storage be checked for leaks at least once every 30 days. Any  
22       leaking PCB Articles or Containers and their contents shall be transferred  
23       immediately to properly marked non-leaking containers. Any spilled or leaked  
24       materials shall be immediately cleaned up and the PCB contaminated materials  
25       shall be disposed of in accordance with 761.60(a)(4). Spills and other  
26       uncontrolled discharges of PCBs at concentrations of 50 ppm or greater  
27       constitute the disposal of PCBs. (40 C.F.R. 761.60(d)).

1                   21. Violation Ten

2                   A leaking PCB Transformer in the storage for disposal facility was  
3 wrapped in plastic. The transformer was not cleaned up or properly  
4 containerized in accordance with the regulations.  
5

6                   22. Regulation - Disposal

7                   40 C.F.R. 761.60(a) requires that liquids containing greater than  
8 50 ppm PCB be disposed of in an incinerator which complies with 40 C.F.R.  
9 761.70, unless those liquids fall within the regulatory exceptions listed in  
10 40 C.F.R. 761.60(a)(2), (3), (4), or (5).  
11

12                   23. Violation Eleven

13                   PGE Failure Reports for five drained PCB Transformers observed in  
14 the storage for disposal facility indicate that the PCB dielectric fluid from  
15 the transformers had been drained into two drums identified as #6114 and  
16 #6115. These drums were not in the storage for disposal facility and no  
17 notation was found that the drums had been shipped off-site for disposal in  
18 accordance with the regulations.  
19

20                   III.

21                   PROPOSED CIVIL PENALTY

22                   24. Section 16 of TSCA, 15 U.S.C. §2615, and the regulations  
23 promulgated thereunder, 40 C.F.R. §761, et seq., authorize a civil penalty of  
24 up to \$25,000.00 per day for each violation of TSCA. Based on the facts  
25 given in Section II above, the nature, circumstances, extent and gravity of  
26 the above-cited violations, and degree of culpability, the following  
27 penalties are hereby proposed:  
28

<u>Regulation</u>	<u>Requirement</u>	<u>Penalty Amount</u>
1. 40 CFR 761.180(a)	Recordkeeping	\$ 200
2. 40 CFR 761.180(a)	Recordkeeping	200
3. 40 CFR 761.30(a)(1)	Use Authorizations	20,000
4. 40 CFR 761.30(a)(1)	Use Authorizations	20,000
5. 40 CFR 761.30(a)(2)	Use Authorizations	20,000
6. 40 CFR 761.40	Marking	3,000
7. 40 CFR 761.40	Marking	10,000
8. 40 CFR 761.65(c)(8)	Storage	500
9. 40 CFR 761.65(c)	Storage	3,000
10. 40 CFR 761.65(c)(5)	Disposal	1,250
11. 40 CFR 761.60(a)	Disposal	<u>5,000</u>

Total \$ 83,150


25. Payment of such penalty shall be by check made payable to the United States Treasurer, remitted to the following:

Environmental Protection Agency, Region 10  
(Regional Hearing Clerk)  
P.O. Box 360903M  
Pittsburgh, Pennsylvania 15251

with a copy sent to:

Regional Hearing Clerk  
Office of Regional Counsel  
Environmental Protection Agency  
1200 Sixth Avenue, S0-125  
Seattle, Washington 98101

ISSUED AT SEATTLE this 30<sup>th</sup> day of September, 1987.

  
ANITA J. FRANKEL, Chief  
Pesticides and Toxic Substances Branch

# Portland General Electric Company

Legal Department

1300 Willamette Center

121 S.W. Salmon Street, Portland, Oregon 97204

(503) 220-3000

Senior Vice President and  
General Counsel

James W. Durham

Associate General Counsel:

James C. L. Baxendale

Douglass M. Hamilton

Assistant General Counsel:

Mary Ellen Eckhardt

Roger K. Harris

Ronald W. Johnson

Julie A. Keil

Steven F. McCarrel

Pamela Grace Rapp

J. Mack Shively

S. Bradley Van Cleave

Lavinia Gordon Whitel

Warren Hastings

(1924-1986)

October 29, 1987

Joan Shirley  
US Environmental  
Protection Agency  
Region 10  
1200 6th Avenue  
Seattle, Washington 98101

Re: Toxic Substances Control Act Complaint  
Docket No. 1087-09-19-2615  
Our File No.: 05GB-040

Dear Ms. Shirley:

This letter is written in response to the above cited Complaint and Notice of Opportunity for Hearing received by Portland General Electric Company (PGE). As we discussed by phone, PGE and EPA have stipulated that the time for filing PGE's Answer in the above case has been extended until November 24, 1987.

We believe that this letter will clarify certain facts and resolve a number of the violations alleged in EPA's Complaint issued as a result of EPA's February 4-6, 1987 inspection.

## Violation No. 1.

The EPA Complaint alleges that the Annual Reports for 1982, 1983 and 1984 revealed inaccuracies in the number of PCB transformers removed and remaining in service.

PGE's Annual Reports for the years cited contained the actual number of transformers removed from service and remaining in service at the end of the calendar year as required by 40 CFR 761.180(a). The numbers may have appeared to the inspector to be "inaccurate" because the Annual Reports did not reflect the number of transformers added to PGE's system during the year in question. These transformers were added as a result of discovery of PCB transformers upon servicing. Documentation showing the numbers of PCB

Joan Shirley  
US Environmental Protection Agency  
October 29, 1987  
Page 2

transformers added to PGE's system during the subject years are available for EPA's review.

Violation No. 2.

The Complaint alleges that the 1985 Annual Report showed a discrepancy between the month (September) that the material was placed into storage for disposal, and the month (October) that the material was removed from service.

PGE's investigation of Violation 2 reveals that page 6 of the 1985 Amended Annual Report contained a typographical error. The date the five bushings were removed from service was correct (10-4-85 to 10-7-85). The date the bushings were placed in storage was incorrectly listed as 9-10-85. Supporting documents (Failed Capacitor Reports) show that the date the bushings were placed in storage was actually October 7, 1985. The date was simply incorrectly transferred from the Failed Capacitor Report to the Annual Report.

Violation No. 3.

EPA's Complaint alleges that the quarterly inspection report records for PCB transformers were not complete. The Violation states that "some substation reports were missing for certain quarters. Inspection reports for some PCB transformers were missing altogether."

PGE requests that additional information be provided regarding this Violation. The allegations as stated in the Complaint provide neither the date nor the location of the allegedly defective inspection reports. PGE believes that it has complied with the intent of the inspection rule and is prepared to provide supporting documentation when the dates and locations of the reports are furnished to us.

Violation No. 4.

This Violation alleges that PGE failed to register all of its PCB transformers in use or stored for reuse with local fire response authorities.

PGE can document that it sent notification letters in all cases where a local fire response authority existed. PCB transformers at three locations (Ft. Rock, Sycan, and Sand Springs) are in extremely remote rural areas where no local

Joan Shirley  
US Environmental Protection Agency  
October 29, 1987  
Page 3

fire response authority exists. For that reason, no notification letters were sent.

Violation No. 5.

Violation 5 alleges that "PGE's procedure of immediate reclassification of electrical equipment upon servicing did not comply with the regulatory requirements". 40 CFR 761.30(a)(2)(v) provides a procedure for reclassification of PCB transformers and PCB contaminated transformers.

PGE routinely tests and retrofills transformers without tracking and retesting the retrofilled transformers. However, PGE has not, as alleged in Violation 5, reclassified these transformers as PCB contaminated or non-PCB. These retrofilled transformers are treated and marked as if they had not been retrofilled because the procedure required by the reclassification regulation is extremely difficult to comply with. PGE places the mark "R" on retrofilled transformers, but continues to treat these transformers as they were originally tested before they were retrofilled. The language of 40 CFR 761.30(a)(2)(5) is discretionary and provides that PCB transformers "may" be reclassified, not that they must be reclassified. The violation also states that "equipment reclassified under the system was incorrectly marked and recorded". PGE disputes this allegation.

Violation No. 6 and Violation No. 8.

These two Violations allege that PGE failed to follow marking and dating requirements pursuant to the PCB regulations. Violation 6 alleges that certain items in PGE's storage for disposal area were not marked properly. Violation 8 alleges that certain of the items mentioned in Violation 6 were also not dated as required by the regulations.

Although PGE believes that certain items listed in Violation 6 were marked correctly, PGE admits that some equipment was improperly marked and dated. PGE has investigated its procedures for marking, labeling and dating PCB contaminated material at the time it is placed into storage for disposal. PGE is drafting new procedures to assure that employees charged with marking, labeling and dating do so according to regulation.

Joan Shirley  
US Environmental Protection Agency  
October 29, 1987  
Page 4

Violation No. 7 and Violation No. 9.

These two Violations also center on marking and dating violations. Violation 7 alleges that the PCB contaminated material in temporary storage was contained in eight unmarked fifty-five gallon drums and that the area where the drums were stored was unmarked.

Violation 9 alleges that these same drums were not dated with the date their contents were removed from service in accordance with 40 CFR 761.65(b). As in Violations 6 and 8, PGE admits that certain marking and dating requirements were not met as required by regulation. In response to these violations, PGE has investigated its procedures for marking and dating PCB contaminated material and is drafting new procedures to assure that employees comply with these regulations.

PGE requests additional information concerning how the amount of the fine was determined for Violations 7 and 9.

Violation No. 10.

This Violation alleges that a leaking PCB transformer in the storage-for-disposal facility was not cleaned up or properly containerized in accordance with 40 CFR 761.60(a)(4).

PGE placed the leaking PCB transformer immediately in a ten mil plastic bag because appropriate size containers were not available. This procedure has been successful in preventing PCB spills into the environment. The referenced item was in a fully protected storage-for-disposal area waiting to be drained and cleaned up for shipment prior to disposal. PGE believes that it met the intent of the regulation and did not pose any risk to the environment through this procedure.

Violation No. 11.

Violation 11 alleges that two drums identified as No. 6114 and 6115 containing PCB dielectric fluid from drained transformers were not in the storage-for-disposal facility and no notation was found showing that the drums had been shipped off-site for disposal in accordance with regulations.

PGE records indicate that the drums in questions, No. 6114 and 6115, were not at the storage-for-disposal facility at the time of the February inspection because these drums had been

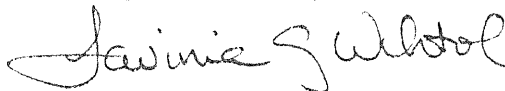
Joan Shirley  
US Environmental Protection Agency  
October 29, 1987  
Page 5

shipped to Ensco on December 10, 1986 for disposal. PGE will make records available to EPA which document the fact that these drums were properly shipped off-site for disposal in accordance with the regulations.

This letter is written for settlement purposes only and nothing contained herein may be used as evidence in any legal proceeding. PGE does not, by this letter, waive any of its rights relating to the claim which is the subject of this proceeding.

I look forward to discussing these issues during our conference call on November 5 at 9:30 a.m. and at a meeting with EPA scheduled for November 13 at 10:00 a.m.

Very truly yours,

A handwritten signature in cursive script, reading "Lavinia G. Wihtol".

Lavinia G. Wihtol

LGW/llm

bc: Floyd Bechtel  
John Chapman  
Ken Davis  
Jim Durham  
Rick Hess  
Fred Lamoureaux  
George Normine  
Dennis Norton

MEMORANDUM

TO: File

FROM: Dennis Norton *DNS*

DATE: November 16, 1987

SUBJECT: TSCA Violation Meeting With EPA

Attendees: EPA - Joan Shirley, Legal Counsel  
Elaine Barrick, Case Reviewer  
PGE - Lavinia Wihtol  
George Normine  
Dennis Norton

A meeting was held on November 13, 1987 with representatives of EPA at their offices in Seattle to review the TSCA violations alleged in EPA's September 30, 1987 letter. During 3-1/2 hours of discussion with EPA, PGE's procedures for handling PCB and PCB-contaminated equipment were reviewed. PGE's activities beyond the scope of TSCA regulations, which minimize the release of PCB into the environment, were emphasized. The following provides a review of each violation and its current status.

Violation 1

Penalty - \$200

The numbers of PCB transformers in the annual reports for 1982, 1983, and 1984 appeared to be inaccurate because additional PCB transformers were identified and added each year. Comments will be included in the future annual reports which identify the number of additional PCB transformers identified so that the total from year to year can be reconciled.

Disposition: Penalty dismissed.

Violation 2

Penalty - \$200

A typographical error appeared in the 1985 annual report which indicated that material was placed into storage for disposal before it was removed from service. The Reports of Failed Capacitor or Transformer Containing PCBs were shown which verified that a typographical error had been made in the report summary.

Disposition: Penalty dismissed.

Violation 3

Penalty - \$20,000

Substation logs were provided to EPA showing that each of the substations containing PCB transformers had been inspected for the quarters previously indicated missing in PGE records. The nature of these inspections is such that the PCB transformers would be inspected for leaks each time the station is visited. PGE contended that this is not a use violation which would justify a \$20,000 fine. The PCB transformers were inspected; however, the paperwork was not completed during some periods. We recommended that this is a reporting violation (Level 6), which should result in a significant reduction of this penalty.

Disposition: EPA will review penalty assessment.

Violation 4

Penalty - \$20,000

Notification to fire districts concerning PCB transformers were made for 26 PCB transformers in 1985. Notification was not made for 37 transformers located at Ft. Rock, Sand Springs, and Sycan. Information was presented to EPA which indicated that there is no primary fire district response agency in the vicinity of these substations because of their remote locations. A summary of the notification and an example letter was provided to EPA. They additionally requested copies of all notification letters.

Disposition: EPA should eliminate penalty subsequent to receipt of letters of notification.

Violation 5

Penalty - \$20,000

During the inspection EPA noted that transformers had non-PCB labels applied to them after being refurbished and painted. From this observation, they assumed that transformers were being reclassified. PGE provided an affidavit from Earl Wood stating that we have not reclassified transformers. The reason for this is that the reclassification requirements of time and temperature are very difficult to achieve. EPA is aware of this burdensome procedure. It was explained that if non-PCB labels were put on transformers after they were refurbished, it would only have been because they were less than 50 ppm PCB before being retrofilled.

Disposition: EPA requested additional information on PGE's transformer refurbishing procedures.

Violation 6 and 8

Penalty - \$3,500

During the inspection several items at the Sellwood storage-for-disposal facility were not labeled and dated. EPA was shown checklists that are currently being used by Storeroom 62 personnel so all PCB and PCB-contaminated equipment to be disposed of will have appropriate labels and dates.

Disposition: Penalty - \$3,500.

Violation 7 and 9

Penalty - \$13,000

The eight unmarked 55-gal. drums at the Central storage area contained filters used in cleaning transformer oil. The assessment of this penalty was based on volume of the 55-gal. drums. We recommended that the assessment should be reviewed, since the filters themselves weigh approximately 1 lb and about 15 filters can be put in a drum. If assessed on a weight basis, the penalty amount should be reduced. EPA suggested that the areas where PCB-contaminated material are stored should be marked and labeled. EPA requested further information on the exact weight and number of filters that could be placed in a barrel.

Disposition: EPA to review penalty based on additional information provided by PGE.

Violation 10

Penalty - \$1,250

A PCB transformer was contained in a 10-mil plastic bag at Sellwood storage-for-disposal facility. It was explained that PGE's procedure is to clean up the transformer leak and then place it in a plastic bag and in a pan to prevent any spillage of PCB into the environment. It was agreed that a plastic bag does not meet the requirements for a leaking PCB transformer container. EPA commented that after seeing the bag itself, it was worth the effort to bring it in and to explain the circumstance of its use.

Disposition: Penalty dismissed.

Violation 11

Penalty - \$5,000

Reports of Failed Capacitor or Transformer Containing PCBs were shown to EPA which demonstrated that the PCB dielectric fluid from the transformers at Sellwood had been pumped into two drums. These drums had been shipped for disposal prior to the inspection even though the transformers were still in storage. The inspector did not ask for a record concerning these drums during the inspection. EPA requested letters showing certification for destruction for these barrels.

Disposition: Penalty should be dismissed pending EPA's receipt of the certification of destruction.

EPA said that they were very pleased with the supplementary material presented concerning the violations (see attached). They suggested that there are mitigating activities that could be agreed to in place of portions of the penalty. As examples they mentioned a PCB handling article was written for the Warehouse Journal and a talk at a radio station has been done in the past. Some of the things that PGE is currently doing to reduce the risk of PCB going into the environment were discussed. It would be appropriate to point these things out in the response to EPA concerning the pending violation assessments.

The following is a summary of the PCB violation penalty assessment:

<u>Penalty</u>	<u>Penalty Dismissed</u>	<u>Unresolved</u>
\$3,500	\$26,600	\$53,000

Action Items

Violation 1 - Explain the number of additional PCB transformers found during the year in the annual report so that this number can be reconciled with the previous year.

Violation 3 - Revise inspection procedures to include a PCB inspection check-off on the record during each site visit.

Violation 4 - Send EPA copies of all PCB transformer location letters of notification to fire districts.

Violation 5 - Send EPA information concerning the procedures for retrofilling PCB-contaminated transformers.

File  
November 16, 1987  
Page 5

Violation 7 - Send EPA information concerning the weight and quantity of filters that can be placed in a 55-gal. drum.

Violation 11 - Send EPA a copy of the certificate of destruction for the oil contained in drums identified as 6114 and 6115.

es 1276

c: Floyd Bechtel  
John Chapman  
Ken Davis  
Jim Durham  
Rick Hess  
Walt Higgins  
Bill June  
Fred Lamoureaux  
George Normine  
Lavinia Wihtol  
Earl Wood

ES-948-87T  
GEN GOV REL 8D

TELECON

TO: Dennis Norton *DMN*  
FROM: Marv Crocker, Fremont National Forest  
DATE: November 10, 1987  
TIME: 2:30 p.m.  
SUBJECT: Sycan Substation

The responsibility for responding to a fire in the Sycan Substation was discussed. Marv Crocker said that Forest Service personnel are not trained in fighting fires in substations. If the structure requires fire control the Forest Service would contact PGE.

DMN:slc

es 1266



Portland General Electric Company

December 28, 1987  
ES-011-87L  
GEN GOV REL 8 ✓

Joan C. Shirley  
Assistant Regional Counsel  
US Environmental Protection Agency  
Region 10  
1200 6th Ave  
Seattle WA 98101

Reference: Toxic Substances Control Act Complaint

Docket #1087-0919-2615

Our File #405GB-040

Dear Ms. Shirley:

Enclosed is the information requested during our December 17, 1987 telephone conversation. We hope this information will resolve those issues which are not yet fully reconciled.

Violation 4

Exhibit 1 includes 4 notification letters demonstrating that the building owners in the vicinity of vaults containing PCB transformers have been appropriately notified.

Violation 5

A transformer shop flow chart exhibit 2 has been included to demonstrate how transformers were handled at the time of the inspection. The box in the top center of the flow chart indicates that when the transformers were received they were tested for PCB content. As indicated to the left of that box if a sample was greater than 500 PPM it was sent to storage for disposal. If the sample was between 50 and 500 ppm PCB the transformer was refurbished, refilled with less than 15 ppm PCB oil and a "R" label was put on the case. It was subsequently shipped to the regions for service as indicated in the center column. If the PCB content was less than 50 ppm the transformer was also refurbished with less than 15 ppm oil and a non-PCB label was installed.

To illustrate PGE's tracking system to ensure that transformers are handled appropriately, according to the PCB content, we have enclosed 4 documents. Exhibit 3 are the repair tickets that are completed by the Journeyman wireman during the refurbishing process. Repair tickets for all transformers in the refurbishing process and completed during the period of inspection February 4 through February 6, 1987 are included. As shown on some of the repair tickets the comment "burnout" indicates this piece of equipment was not refurbished. To track these transformers through the transformer shop the reference is the company # which is at the upper left hand corner of the repair ticket.

Exhibit 4 includes copies of the transformer shop's manually kept oil sampling log. The second column of that document traces the company #, the fourth column indicates the PCB concentration and the seventh column indicates the date the equipment was sampled. The company number from the repair ticket can be traced to this document which will show the PCB concentration. Only those items marked with an X in the far left hand column were in the transformer shop at the time of the inspection.

Exhibit 5 shows the transformer master update. This is a computerized data base which includes all pertinent transformer information including PCB level and test date. The tracking mechanism is the transformer company number shown at the upper left hand column. The PCB concentration is shown in approximately the middle of the right hand column under the heading Oil (GAL) PCB in. A minus 50 ppm illustrates that the PCB content of the equipment was less than 50 ppm.

Exhibit 6 is a copy of the Oregon Analytical Laboratory PCB test reports which shows the amount of PCB in the transformers. Note that the company # is in the second column (digits before the slash). This includes PCB test data for the transformers in the transformer shop during the inspection during the February 4 through the 6th, 1987.

We trust that this information will fully demonstrate that Portland General Electric has an adequate system of tracking the equipment through the transformer shop and refurbishing process. In addition, it demonstrates that the transformer shop fully tracks all transformers by PCB content.

Joan C. Shirley  
December 28, 1987  
Page 3

The attached information documents that the transformers in the transformer shop during the inspection February 4 through 6 contained less than 50 ppm when entering the shop and were designated as non-PCB.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. J. Hess". The signature is stylized with a large, looped "R" and a cursive "Hess".

R. J. Hess, Manager  
Environmental Sciences

RJH:DMN:slc

c: Lavinia Wihtol, W/Enclosures

es 1334



Portland General Electric Company  
Central Division

EXHIBIT 1

November 22, 1985

Standard Insurance Company  
P. O. Box 711  
Portland, Oregon 97207

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 96  
S. W. 5th Ave. between Taylor and Salmon Streets.

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

A handwritten signature in cursive script, reading 'G.R. Willis', is written over the typed name.

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Pacific Power & Light Company  
920 S. W. 6th Avenue  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 96  
S. W. 5th Ave. between Taylor and Salmon Streets.

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

*G. R. Willis*  
Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Albert R. Bullier, Sr.  
707 S. W. Washington St.  
Portland, Oregon 97205

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 50  
S. W. Alder 40 feet east of Broadway

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Norris & Stevens  
Attention: Fred Normanden  
610 S. W. Broadway  
Portland, Oregon 97205

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 50  
S. W. Alder 40 feet east of Broadway

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp

3700 S.E. 17th Street, Portland, Oregon 97202



Portland General Electric Company  
Central Division

November 22, 1985

ASA Properties, Hawaii  
H. Graham Salisbury  
319 S. W. Washington St.  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 50  
S. W. Alder 40 feet east of Broadway

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

*G. R. Willis*

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Electric Building  
Building Manager, Lou Ann Cathery  
621 S. W. Alder  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 50  
S. W. Alder 40 feet east of Broadway

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp



November 22, 1985

Ralph D. Schlesinger  
610 S. W. Alder St., 12th Floor  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 50  
S. W. Alder 40 feet east of Broadway

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Melvin Mark Properties  
Attention: John Carder  
111 S. W. Columbia Bl.  
Suite 1380  
Portland, Oregon 97201

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 66  
S. W. 5th Ave. 40 feet north of Alder St.

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer



Portland General Electric Company  
Central Division

November 22, 1985

Frederick & Nelson  
Attention: Ted Hodges  
521 S. W. 5th Avenue  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 66  
S. W. 5th Ave. 40 feet north of Alder St.

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

Far West Federal  
Attention: Harper Hamilton, Sr. V.P.  
400 S. W. 6th Avenue  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 70  
N. W. Davis between Broadway & Park

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

Please call me at 226-8715 if you have any questions.

Sincerely,

A handwritten signature in cursive script, reading 'G. R. Willis'.

Glenn R. Willis  
Chief Field Engineer

GRW/skp



Portland General Electric Company  
Central Division

November 22, 1985

General Services Administration  
1616 Federal Building  
1220 S. W. 3rd Avenue  
Portland, Oregon 97204

Dear Sir:

The Environmental Protection Agency (EPA) on July 17, 1985 adopted rules (40 CFR Part 761) requiring the owners of electrical transformers classified as "PCB" to register their location with the building owners within 30 meters. This letter will serve as your notification that Portland General Electric Company has PCB transformers located within this distance from your building. Listed below is the location and principle constituent of the dielectric fluid.

None of these transformers were manufactured as "pure" PCB transformers. They only contained mineral oil fluid that was contaminated with PCB to a value greater than 500 parts per million, and therefore by regulation must be classified as a PCB transformer. All of these transformers have recently been retrofilled with new mineral oil. Our experience indicates that these units now should be classified as only PCB contaminated (less than 500 ppm). However, to technically specify this, a ninety day waiting period and a subsequent oil analysis is required. We will notify you when this testing is completed.

This unit is located in a concrete vault in a street area at the following location:

Location: Vault No. 70  
N. W. Davis between Broadway & Park

Dielectric Fluid: Mineral Oil

Number of Transformers: 1

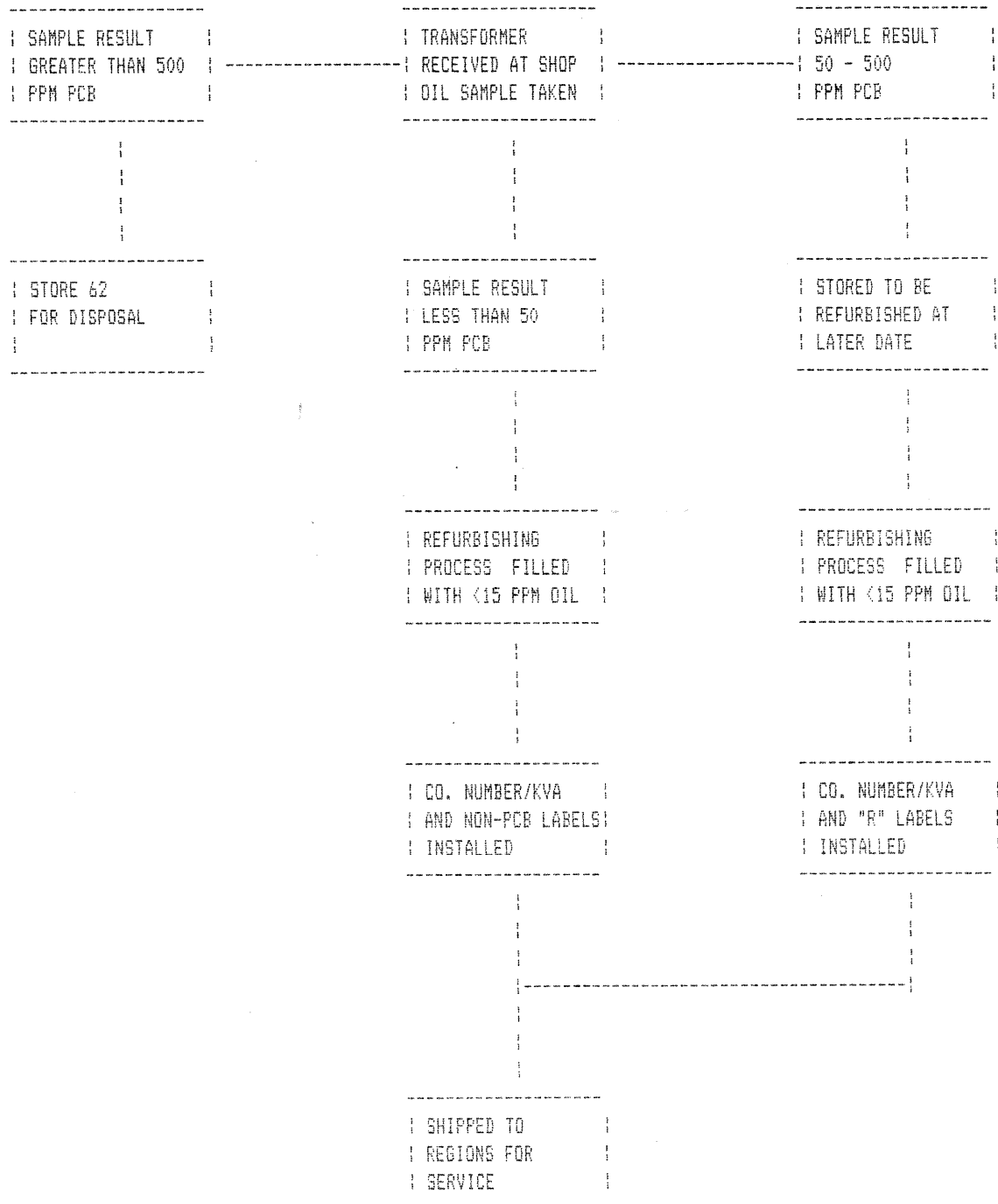
Please call me at 226-8715 if you have any questions.

Sincerely,

Glenn R. Willis  
Chief Field Engineer

GRW/skp

## TRANSFORMER SHOP FLOW CHART



PGE 0617 (Apr 86)

REPAIR TICKET

Co. 11578 kVA 10

Make GE Ser. F25345462K

Came in as JCB Toi

Came from Cable

Voltage 7200 AT 120/240

Time to complete 1

Inspected and checked Cable

New oil \_\_\_\_\_ Remove breaker ✓

Completed as \_\_\_\_\_ Bush ✓

Pull core and coils \_\_\_\_\_

Strip and prime Burr

Subox paint \_\_\_\_\_

Tap set on \_\_\_\_\_

Date 2-4-87

PGE 0617 (Apr 86) ✓

PGE 0617 (Apr 86)

[illegible]

20

1

## X

X

QUANTITY	PARTS
1	Primary Bushing Tank Gaskets
1	Primary Bushing Term. Gaskets
3	Secondary Bushing Tank Gaskets
3	Secondary Bushing Term. Gaskets
1	Cover
1	Handhole
	Fuse
	Templex Tube
	Ground Clamp
	Weld C.P. Hole
	Weld Hangers
	Weld Cover Bushing Hole
	Weld Term. Pockets
	Punch Cover for Bushing
	NEW Tank
1	SET Sec Bush

[illegible][illegible][illegible]

Co. 8320 kVA 15  
 Make Kuhl Ser. C 16243  
 Came in as ICB CP  
 Came from Ore. City  
 Voltage 7200 NT 120/240  
 Time to complete 2:30  
 Inspected and checked B. May  
 New oil ☒ Remove breaker ☐  
 Completed as CF Bush ICB  
 Pull core and coils ☒  
 Strip and prime ☐  
 Subox paint ☒  
 Tap set on 7200  
 Date ~~1-30-87~~ 2-6-87  
 PGE 0617 (Apr 86) ☒

QUANTITY	PARTS
1	Primary Bushing Tank Gaskets
1	Primary Bushing Term. Gaskets
3	Secondary Bushing Tank Gaskets
3	Secondary Bushing Term. Gaskets
✓	Cover
✓	Handhole
	Fuse
	Templex Tube
2	Ground Clamp
✓	Weld C.P. Hole
	Weld Hangers
	Weld Cover Bushing Hole
	Weld Term. Pockets
	Punch Cover for Bushing

### REPAIR TICKET

Co. 11015 kVA 15  
 Make West Ser. S-57F247  
 Came in as CF ICB  
 Came from Port  
 Voltage 7200 NT 120/240  
 Time to complete 1:45  
 Inspected and checked B. May  
 New oil ☒ Remove breaker ☐  
 Completed as CF Bush ICB  
 Pull core and coils ☐  
 Strip and prime ☐  
 Subox paint ☒  
 Tap set on 7200  
 Date 2-6-87  
 PGE 0617 (Apr 86) ☒

QUANTITY	PARTS
	Primary Bushing Tank Gaskets
	Primary Bushing Term. Gaskets
2	Secondary Bushing Tank Gaskets
2	Secondary Bushing Term. Gaskets
✓	Cover
	Handhole
	Fuse
	Templex Tube
	Ground Clamp
	Weld C.P. Hole
	Weld Hangers
	Weld Cover Bushing Hole
	Weld Term. Pockets
	Punch Cover for Bushing
2	sec. bushing where
	broken the trans.
	had to be over-
	hauled on 1-15-87

2 PM

Burn out

W  
C  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845

Burn  
out

Co. 22096 KVA 15  
Make KWILMAN Ser. 3-169643D  
Name in as CE ICB  
Name from SALEM  
Voltage 7200/120/240  
Time to complete 2 Hrs.  
Inspected and checked SANTOS  
New oil ☒ Remove breaker ☐  
Completed as OK Bush ICB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ☒  
Tap set on N.T.  
Date 2-5-87  
PGE 0617 (Apr 86)

[illegible]

REPAIR TICKET

Co. 22741 kVA 15

Make M<sup>c</sup>Ed Ser. 71VJ220014

Came in as CF ICB

Came from Gresham

Voltage 7200 NT 120/240

Time to complete 2 1/2 hr

Inspected and checked [Signature]

New oil ☒ Remove breaker ☐

Completed as CF Bush ICB

Pull core and coils ☐

Strip and prime ☐

Subox paint ☒

Tap set on NT

Date 2-4-87

PG&E 0617 (Apr 86)

[illegible]

Co. 25379 kVA 15  
Make WH Ser. 645A1687  
Came in as CONV 2CB  
Came from Portland  
Voltage 12000/10800 120/240  
Time to complete 2 1/2 hr  
Inspected and checked Ind  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as CONV Bush 2CB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on 11,100  
Date 2-4-87  
PGE 0617 (Apr 86)

[illegible]

Co. 25714 kVA 15  
Make West Ser. 68AF5047  
Came in as CONV ZCB  
Came from St. Helens  
Voltage 7200/6480 120/240  
Time to complete 1:45  
Inspected and checked B. May  
New oil ☒ Remove breaker ☐  
Completed as CONV Bush ZCB  
Pull core and coils ☐  
Strip and prime ☐  
Subox paint ☒  
Tap set on 7200  
Date 2-6-87  
PGE 0617 (Apr 86) ☒

[illegible]

[illegible]

Co. 30055 KVA 15  
Make HOWARD Ser. 6556-576  
Came in as CK ICB  
Came from BRESHAM  
Voltage 7200/120/240  
Time to complete 2 hrs.  
Inspected and checked SANTOS  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as CK Bush ICB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on N.E.  
Date 2-4-87  
PGE 0617 (Apr 86)

[illegible]

[illegible]

Co. 2938 KVA 25  
Make West Ser. 3939084  
Came in as CONV 2PB  
Came from Port  
Voltage 2400 XLT 120/240  
Time to complete 2130  
Inspected and checked B May  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as CONV Bush 2PB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on 2400  
Date 2-4-87  
PGF 0617 (Apr 86) ✓

[illegible]

[illegible][illegible][illegible]

REPAIR TICKET

Co. 9650 KVA 25

Make WEST Ser. \$55D0926

Came in as 1CR CF

Came from WESTERN

Voltage 2200 WT 120/540

Time to complete 1

Inspected and checked Clark

New oil \_\_\_\_\_ Remove breaker \_\_\_\_\_

Completed as \_\_\_\_\_ Bush Det

Pull core and coils \_\_\_\_\_

Strip and prime \_\_\_\_\_

Subox paint Hydr

Tap set on \_\_\_\_\_

Date 2-6-87

PGF 0617 (Apr 86)

[illegible]

[illegible][illegible]

Co. 11005 KVA 25  
 Make West Ser. 56F2323  
 Came in as CP ICB  
 Came from Stock  
 Voltage 7200 NT 120/240  
 Time to complete 2:30  
 Inspected and checked B. May  
 New oil ✓ Remove breaker ✓  
 Completed as CF Bush 1 3  
 Pull core and coils ✓  
 Strip and prime \_\_\_\_\_  
 Subox paint \_\_\_\_\_  
 Tap set on 7200  
 Date 2-2-87  
 PGE 0617 (Apr 86)

QUANTITY	PARTS
1	Primary Bushing Tank Gaskets
1	Primary Bushing Term. Gaskets
3	Secondary Bushing Tank Gaskets
3	Secondary Bushing Term. Gaskets
1	Cover
1	Handhole
	Fuse
1	Templex Tube
2	Ground Clamp
2	Weld C.P. Hole
	Weld Hangers
	Weld Cover Bushing Hole
	Weld Term. Pockets
	Punch Cover for Bushing

### REPAIR TICKET

Co. 11785 KVA 25  
 Make Kuhlman Ser. CE5402  
 Came in as ICB Cond.  
 Came from Port In up  
 Voltage 7200 NT 120/240  
 Time to complete 3  
 Inspected and checked Clark  
 New oil ✓ Remove breaker \_\_\_\_\_  
 Completed as CF Bush ICB  
 Pull core and coils \_\_\_\_\_  
 Strip and prime \_\_\_\_\_  
 Subox paint \_\_\_\_\_  
 Tap set on NT  
 Date 2-6-87  
 PGE 0617 (Apr 86)

QUANTITY	PARTS
1	Primary Bushing Tank Gaskets
1	Primary Bushing Term. Gaskets
3	Secondary Bushing Tank Gaskets
3	Secondary Bushing Term. Gaskets
1	Cover
1	Handhole
	Fuse
	Templex Tube
1	Ground Clamp
	Weld C.P. Hole
	Weld Hangers
1	Weld Cover Bushing Hole
	Weld Term. Pockets
	Punch Cover for Bushing
	Drill Ground Lug
	Paint lid

4

Replaced Couch

X

2022

Burn  
out

Co. 19177 kVA 25  
Make AC Ser. 3617717  
Came in as OK 1CB  
Came from SALEM  
Voltage 7200/120/240  
Time to complete 2 hrs.  
Inspected and checked SANTOS  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as OK Bush 1CB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on N.T.  
Date 2-5-87  
PGE 0617 (Apr 86)

[illegible]

Co. 2013 kVA 25  
Make GE Ser. 01377-1-1  
Came in as 2CB Coil  
Came from SECTION  
Voltage 138kV  
Time to complete 2  
Inspected and checked OK  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as Conv. Bush 2CB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint \_\_\_\_\_  
Tap set on 200  
Date 2-11-57  
PGE 0617 (Apr 88) ✓

[illegible]

[illegible]

Co. 30834 KVA 25  
Make R+E Ser. 682017177  
Came in as CONV 2CB  
Came from Port.  
Voltage 12000/10800 120/240  
Time to complete 2:00  
Inspected and checked B. May  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as CONV Bush 2CB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on 11,100  
Date 2-4-87  
PGE 0617 (Apr 86)

[illegible]



[illegible]

REPAIR TICKET

Co. 1906 KVA 37 1/2

Make WEST. Ser. 6335536

Came in as CONV. 2 CB

Came from GRESHAM

Voltage 12,600/11,400/240/480

Time to complete 2 hrs.

Inspected and checked SANTOS

New oil ☒ Remove breaker ☐

Completed as CONV. Bush 2 CB

Pull core and coils ☐

Strip and prime ☒

Subox paint ☒

Tap set on 12,600

Date 2-4-87

PGE 0617 (Apr 86)

[illegible]

Co. 5548 KVA 37 1/2  
Make GE Ser. F13820062K  
Came in as CR ICB  
Came from PORTLAND  
Voltage 7200/120/240  
Time to complete 2 1/2 hrs.  
Inspected and checked SANTOS  
New oil ✓ Remove breaker \_\_\_\_\_  
Completed as CR Bush ICB  
Pull core and coils \_\_\_\_\_  
Strip and prime \_\_\_\_\_  
Subox paint ✓  
Tap set on N.T.  
Date 2-4-87  
PGE 0617 (Apr 86)

[illegible]

# REPAIR TICKET

REPAIR TICKET

Co. 6909 KVA 37 1/2

Make RTE Ser. 5201466

Came in as CONV. 2 CB

Came from STOCK

Voltage 2400/7200/120/240

Time to complete 2 HRS.

Inspected and checked SANTOS

New oil ☒ Remove breaker ☐

Completed as CONV. Bush 2 CB

Pull core and coils ☐

Strip and prime ☐

Subox paint ☒

Tap set on 2400

Date 2-5-87

PGE 0617 (Apr 86)

[illegible]

[illegible][illegible]



SAMPLE #	COD	KVA	PCB CONC	GAL	MANF	SAMPLE DATE	SERIAL	TEST
12863	25883	25	20			12-15-86	702013559	Hold
12883	17082	15	<1			12-15-86	3781240	Hold
12878	20897	25	<1			12-15-86	5205689	Hold
12885	10289	10	91			12-15-86	B749623	Hold
12880	5570	10	43			12-15-86	8988669	Hold
X 12875	5176	15	<1			12-15-86	1335811	Hold
12876	5157	25	62			12-15-86	B795804	Hold
12886	698	75	119			12-15-86	9855164	Hold
12882	938	75	2			12-15-86	D86564858K	Hold
12877	38305	15	<1			12-15-86	N703920YBX	Hold
12874	8195	25	11			12-15-86	6477299	RETROFILL
12868	Reclosure	140 Amps	26	4	LM	12-15-86	15120	Hold
12853	3931	25	87	19	GE	12-15-86	8387373	Hold
12864	T183	1000	<1	240	GE	12-15-86	P171848	New
12881	Reclosure	140 Amps	31	4	LM	12-15-86	37609	Hold
12884	T-913	150	<1	105	GE	12-15-86	P171214	New
12879	30307	500	14	519	AC	12-15-86	32150002694	REGULATOR
12899	12162	50	21			12-16-86	K333174 Y72 PN	Hold
12904	14560	15	243			12-16-86	5523029	Hold

SAMPLE #	CO #	KVA	PC CONC	CHAL	THINF	SAMPLE DATE	SCAN	TEST
								125
12992	27827	10	88			12-19-86	9166917	Hold
12990	27831	10	8			12-19-86	7444524	Hold
12988	24135	15	150			12-19-86	7334847	Hold
12984	8364	37½	9			12-19-86	9654291	Hold
12982	24253	15	183			12-19-86	8298116	Hold
12991	8690	25	13	5	LM	12-19-86	1440111	RETRO
12986	T-111	1000	41	208	GE	12-19-86	P171868	New
12980	T-236	112	32		WEST	12-19-86	77E483335	OUTGOING
12981	T-567	112	37		WEST	12-19-86	81JE449033	Hold
12993	7249	15	15	9	GE	12-22-86	9770084	RETRO
13005	T-208	112	13	102	WEST	12-22-86	76C195026	OUTGOING
13004	37775	15	41			12-22-86	811150123	Hold
13003	9491	5	41			12-22-86	4474003	Hold
* 13002	11005	25	41			12-22-86	S-56F2323	Hold
13009	6309	3	43			12-22-86	4473812	Hold
13001	16009	15	2			12-22-86	3604614	Hold
13006	7080	15	352			12-22-86	B739576	Hold
* 13008	46890	25	41			12-22-86	N430718YBVH	Hold
* 13007	7363	15	38			12-22-86	1318728	Hold

12963	627	7½	17			12-18-86	718701	Hold	1
12962	28003	10	1			12-18-86	2880131	Hold	1
12969	1949	7½	2			12-18-86	1602800	Hold	1
12960	1632	7½	4			12-18-86	4063513	Hold	1
12973	4639	25	6			12-18-86	5094035	Hold	1
12972	25054	15	10			12-18-86	8495041	Hold	1
12961	T 551	225	<1	120	GE	12-18-86	P171729	New	1
12978	T 628	300	<1	160	GE	12-18-86	P171736	New	1
12965	30298	10	6	8	GE	12-18-86	732028440	Hold	1
12970	25089	15	30	11	LM	12-18-86	1899403	Hold	1
12968	24735	15	29	10	WAS	12-18-86	5R33845	Hold	1
12967	22220	15	<1	16	R7E	12-18-86	712005580	Hold	1
12958	26660	25	33	19	R7E	12-18-86	712001096	Hold	1
12979	20409	25	<1	18	WAS	12-18-86	65A610801	Hold	1
12957	21336	25	<1	12	R7E	12-18-86	6217749	Hold	1
12985	40146	25	<1			12-19-86	77A272918	Hold	1
X 12989	11785	25	<1			12-19-86	C85402	Hold	1
12987	952	37½	70			12-19-86	9267677	Hold	1
12983	27832	10	6			12-19-86	9672522	Hold	1

SAMPLE #	CODE	KUH	ACB CONC	GAL	MANF	DATE	SER #	TEST 131
13229	8169	37 1/2	1930			12-31-86	7666887	Hold
13227	15853	25	13			12-31-86	3598215	Hold
13224	5589	50	5			12-31-86	F93757964K	Hold
13226	24575	15	1			12-31-86	F25406862K	Hold
13182	T 630	300	<1	130	McGR.	12-31-86	862N611001	NEW
13183	9611	15	15	10	KUHL	12-31-86	C46146	RETRO
13228	T 553	225	<1	130	McGR.	12-31-86	862N600001	NEW
13237	10705	25	16	19	AC	1-2-87	2919551	RETRO
13234	10334	10	14	10	GE	1-2-87	B744183	RETRO
X 13240	11015	15	<1			1-2-87	557F247	Hold
13233	8000	15	19			1-2-87	6921525	Hold
13239	10455	5	4			1-2-87	2327568	Hold
13238	1750	100	<1			1-2-87	H54625168K	Hold
13232	1752	100	<1			1-2-87	H54625468K	Hold
13236	1751	100	<1			1-2-87	H54625268K	Hold
13230	7345	10	1			1-2-87	5397243	Hold
13231	7550	75	<1			1-2-87	79JT058053	Hold
13241	11467	5	<1			1-2-87	6324530	Hold
13243	30522	10	<1			1-2-87	742005390	Hold

SAMPLE #	CONC	RUN	PCB CONC	GAL	MINUTE	DATE	SER #	TEST
13457	9193	25	288			1-16-87	6953346	Hold
13471	14074	25	31			1-16-87	E23309959K	Hold
13470	2728	37 1/2	<1			1-16-87	C66701	Hold
13456	28086	10	90			1-16-87	F68689483V	Hold
13473	14128	5	217			1-16-87	E98391463P	Hold
13459	3571	75	<1			1-16-87	712005948	Hold
13463	1061	25	47			1-16-87	2435184	Hold
13458	24108	15	134			1-16-87	6280669	Hold
X13461	8320	15	<1			1-16-87	C16243	Hold
13460	24378	25	<1			1-16-87	L669703K74P	Hold
13465	9466	25	336			1-16-87	2801147	Hold
13462	T-5527	75	<1	56	WEST	1-16-87	86JMS19079	New
13475	7080	15	3	10	GIE	1-16-87	B739576	Retro
3474	Feedstock	75	26		LIM	1-16-87	27107	Hold
3464	T-8526	75	<1	56	WEST	1-16-87	86JMS19053	New
3476	T-914	150	<1	105	WEST	1-19-87	86JMS12054	New
3485	Feedstock	75	4		LIM	1-19-87	10956	Hold
3486	T-8525	75	<1	100	WEST	1-19-87	86JMS13165	New
3479	F-631	300	<1	110	WEST	1-19-87	86JL805032	New

13501	T-91	1000	<1	6.2	1-20-87	M591318TAAH	OK	13
X 13481	17393	25	<1		1-20-87	3427253	Hold	13
13487	41693	25	<1		1-20-87	366715100318	Hold	13
13490	19804	10	1		1-20-87	62 \$L988	Hold	13
13477	19696	10	24		1-20-87	F25556962K	Hold	13
13494	3136	15	<1		1-20-87	1955071	Hold	13
13478	10222	10	38		1-20-87	6342934	Hold	13
3491	14036	10	29		1-20-87	2995415	Hold	13
3482	16935	10	22		1-20-87	5N23702	Hold	13
3484	9763	5	26		1-20-87	2178541	Hold	13
3506	13399	5	29		1-20-87	B884850	Hold	13
3515	13156	5	27		1-20-87	B869753	Hold	13
3508	10310	5	28		1-20-87	5445447	Hold	13
3510	11550	5	32		1-20-87	B609816	Hold	13
3488	7826	5	19		1-20-87	843829	Hold	13
3493	8577	5	28		1-20-87	8486475	Hold	13
3489	11577	5	25		1-20-87	B609810	Hold	13
3495	7922	5	30		1-20-87	8304290	Hold	13
3483	13198	5	24		1-20-87	B970120	Hold	13

SAMPLE #	CO #	REA	YCS CONC	GEN	INVT	DATE	SER #	TEST
13532	20072	15	43			1-21-87	692011768	Hold
13537	887	75	29			1-21-87	1546513	Hold
13533	T-91	1000	13			1-22-87	M591318TARA	OUTGOING
13528	V Reclosure	140 NMP	12			1-22-87	130096	Hold
13557	7681	75	<1			1-22-87	N023710YASA	OUTGOING
13559	7680	75	<1			1-22-87	N023709YASA	OUTGOING
13552	4813	100	<1			1-22-87	N610692YGW	OUTGOING
X 13551	4063	25	46			1-22-87	4153424	RETIRE
13566	4953	100	<1			1-22-87	861146600	New
13550	T 8539	75	<1			1-22-87	866010122	New
13555	19301	15	<1			1-22-87	68AT8833	Hold
13556	33462	15	<1			1-22-87	77A202670	Hold
13549	7100	15	4			1-22-87	6337883	Hold
13558	25605	10	7			1-22-87	5057953	Hold
3560	24684	25	<1			1-22-87	5068130	Hold
3563	3722	100	<1			1-22-87	M001375KBLA	Hold
3564	6305	10	48			1-22-87	7906394	Hold
3547	3666	10	263			1-22-87	72213	Hold
3565	11204	15	265			1-22-87	D759454	Hold

SAMPLE #	CON	KVA	PCB CONC	GWL	DEPTH	DATE	SERIAL	TEST
13660	8530	75	<1			1-26-87	861144016	New
13646	8531	75	<1			1-26-87	861144017	New
13652	6835	5	29			1-26-87	3927115	Hold
13664	8330	5	26			1-26-87	4473381	Hold
13655	8479	5	26			1-26-87	4474308	Hold
13654	10975	5	29			1-26-87	6169083	Hold
13649	✓ 14416	5				1-26-87	67D21129	Hold
X 13648	1904	37½	<1			1-26-87	6320678	Hold
13663	9564	5	28			1-26-87	4474106	Hold
X 13661	9503	25	<1			1-26-87	C36969	Hold
X 13647	22741	15	26			1-26-87	71VJ220014	Hold
13659	11014	5	28			1-26-87	B524872	Hold
13662	14425	5	43			1-26-87	E40851662P	Hold
13651	9884	5	31			1-26-87	2318914	Hold
13645	7028	5	84			1-26-87	7977924	Hold
13657	11018	5	28			1-26-87	B524878	Hold
X 13653	30055	15	<1			1-26-87	6556576	Hold
X 13650	8965	50	17			1-26-87	4914334	Hold
13658	11836	15	22			1-26-87	3166199	Hold

SAMPLE #	CO#	KVA	PCB CONC	GAL	MANF	DATE	SER #	TEST 149
X 13688	30834	25	<1			1-28-87	682017177	Hold
13687	5259	25	41			1-28-87	L9C 2035	Hold
X 13683	2938	25	41			1-28-87	3939084	Hold
13669	5008	25	65			1-28-87	5354013	Hold
X 13689	35799	15	<1			1-28-87	792018311	Hold
X 13686	5548	37½	13			1-28-87	F13820062K	Hold
X 13681	17588	25	28			1-28-87	2027915	Hold
X 13682	10112	25	<1			1-28-87	1561393	Hold
13684	16561	10	15			1-28-87	5M18670	RETRO
X 13714	19177	25	11			1-28-87	3617717	Hold
13715	26584	10	<1			1-28-87	J781057K71	Hold
X 13708	18987	10	<1			1-28-87	3386098	Hold
X 13713	22096	15	<1			1-28-87	3169643D1	Hold
13712	25234	50	<1			1-28-87	105030782	Hold
X 13710	19558	10	2			1-28-87	F25345462K	Hold
X 13711	14073	15	36			1-28-87	SR54164	Hold
X 13709	289	167	2			1-28-87	B1402916	Hold
13716	287	167	2			1-28-87	B1402914	Hold
13837	9466	25	2			1-29-87	2801147	RETRO

SAMPLE #	COFF	KOH	PCB CONC	BAR	MANF	DATE	SER #	TEST	S
148									
X 13644	1906	37 1/2	6			1-26-87	6385536	Hold	1
X 13656	22189	10	<1			1-26-87	65PM10683	Hold	1
13643	19193	25	2			1-26-87	3617730	Hold	1
13667	8954	10	15			1-27-87	B40217	RETRO	1
13670	14796	15	15			1-27-87	F25356462K	RETRO	1
13675	27653	10	14			1-27-87	6963776	RETRO	1
X 13672	1357	75	40			1-27-87	114426	Hold	1
X 13677	30416	25	11			1-27-87	09377114	Hold	13
X 13676	9650	25	39			1-27-87	5550926	Hold	13
X 13674	12498	15	2			1-27-87	E24199959K	Hold	1
13671	24537	25	35			1-27-87	69VL120009	Hold	1
13666	1458	10	43			1-27-87	8662362	Hold	1
13679	16432	50	<1			1-27-87	74V6060001	Hold	1
13665	16929	25	31			1-27-87	111918	Hold	1
X 13673	28670	10	<1			1-27-87	K497764K72A	Hold	1
13668	30442	25	30			1-27-87	60002413	Hold	1
X 13680	30492	25	31			1-27-87	F68918263K	Hold	1
13678	13196	50	20			1-27-87	G16697465K	Hold	13
X 13685	25379	15	2			1-28-87	645A1687	Hold	1

SAMPLE #	CO #	RVA	PCB CONC	GAL	INSTR	DATE	SER #	TEST	SAN
150									
13854	7603	5	40			1-30-87	4151399	Hold	13
X 13851	10126	25	1			1-30-87	C55188	Hold	13
13848	17944	25	<1			1-30-87	616721113	Hold	13
	15070	50				1-30-87	72V6066025	Hold	13
13853	15757	50	<1			1-30-87	732010953	Hold	13
X 13845	36442	25	25			1-30-87	75AF328	Hold	13
13847	141017	15	44			1-30-87	645E1598	Hold	13
X 13850	25714	15	41			1-30-87	68AF5047	Hold	13
13846	44690	15	40			1-30-87	615M1402	Hold	13
13852	29061	10	85			1-30-87	D240694	Hold	13
X 13849	27465	15	<1			1-30-87	1230080K74A	Hold	13
13838	30298	500	15	545	GE	1-30-87	D550916	OUT 601116 <sup>REG.</sup>	13
X 13842	6338	50	12	42	GE	1-30-87	642572965K	Hold	13
X 13841	6909	37½	<1	18	RTE	1-30-87	5201466	Hold	13
13840	5257	10	15	10	GE	1-30-87	7485216	RETRO	13
13839	30257	375	36	522	AC	1-30-87	52116000093	REGULATION	13
13843	9193	25	<1	10	West	1-30-87	6933346	RETRO	13
13856	T-780	500	<1	120	GE	2-2-87	P171781	"R" Temp New	13
13855	7111	10	16	10	MOL	2-2-87	1136528	RETRO	13

84  
Sample 10

	CO#	kVA	PCB CONC	GAS	MANF.	SAMPLE DATE	SER#	FIELD TEST	So
	15721	15		12	WAG	1-14-85	5U10058	OK	
	1797	167		56	RTE	1-14-85	751001562	OK	
3338	6569	37 1/2	22	18	RTE	1-14-85	4203093	Hold	
3337	8359	10	36	13	KuHL	1-14-85	A88909	Hold	
	27499	25		17	GE	1-14-85	K463157K71A	OK	
3339	23414	10	47	8	PENN	1-14-85	6136398-1-31	Hold	
	9070	10	72	8	PENN	1-14-85	50968-33	Hold	
3336	Reclosure	140 AMP	29	5	LM	1-15-85	34654	Hold	
3347	T-490	225	45	180	West	1-15-85	850A243218	New OUTGOING	
3348	T-161	1000	45	350	RTE	1-15-85	846009522	New OUTGOING	
	25012	15		17	GE	1-15-85	9672797	OK	
3420	3969	37 1/2	42	25	West	1-15-85	3266242	OK	
3397	3968	37 1/2	45	25	West	1-15-85	3266240	OK	
3398	3967	37 1/2	7	25	West	1-15-85	3265860	OK	
X 3422	3494	25	37	17	West	1-15-85	3936632	Hold	
3396	14079	5	17	5	GE	1-15-85	3457397	OK	
	37950	15		14	RTE	1-15-85	831096562	OK	
	25731	50		33	RTE	1-15-85	841134138	OK	

PRINTED BY E62620

COMMAND: P

PAGE 1 OF 1

MAP #: 000-00

TRANSFORMER CD #: 06909

MOUNT:

SIZE: 0037 5

MODE: X (A, C, D, P, R)

JOB #:

PO #:

DATE:

SERIAL #: 00005201466

PRI PHS:

ID NO:

MFG CODE: 25 R. T. E.

SHOP USE:

PRI VOLT: 17 2400 X 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 02 TWO COVER

DIV/YARD: 10 CENTRAL 00

TYPE CD: 1 OVERHEAD

STATUS: 2 INACTIVE - IN STOCK

CLASS CD: 01 CONVENTIONAL

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 01 30 87

TAP POSN: 1 NO TAP

TAP SETG: 2400 OUT)

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y				#TAPS:	0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE:	1	ZIMPEDANCE: 1.70
07 14 74	54363	01	INSTALLED	2ND HAND:	N	WEIGHT(LB):
02 28 77	07309	02	REMOVED			
				MAINT:	02 05 87	PURCH: 1965 00
				REWIND:		NEW: 1965 00

REMARKS:

PRINTED BY E62620

1998-1999

FR1 FR5

## W I T N E S S

THE MARKS

COMMAND: P PAGE 1 OF 1 MAP #: C11-35B  
 TRANSFORMER CD #: 08765 MOUNT: 12117  
 SIZE: 0050 0 MODE: X (A, C, D, P, R) JOB #:  
 PD #: DATE:

SERIAL #: 00004914334 PRI-PHS: C ID-NO:  
 MFG CODE: 03 ALLIS CHALMERS SHOP USE:  
 PRI VOLT: 03 7200 USE CD: 00  
 SEC VOLT: 01 120/240 OWNER CD: 1 PGE OWNED  
 BUSHINGS: 01 SINGLE COVER DIV/YARD: 40 WESTERN 00  
 TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
 CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(GAL): PCB IN) -50 01 26 87  
 TAP POSN: 1 NO TAP TAP SETG: OUT)  
 FUSE SIZE: XTAPS: 0.0

H I S T O R Y				#TAPS: 0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	%IMPEDANCE: 1.60
05 28 87	53562	01	INSTALLED	2ND HAND: N	WEIGHT(LB):
12 05 86	99910	04	SHIPPED TO SHOP		
01 26 87	99950	04	SHIPPED TO SHOP	MAINT: 02 04 87	PURCH: 1969 00
01 22 87	81477	02	REMOVED	REWIND:	NEW: 1969 00

REMARKS:

PRINTED BY E61639

PAGE 1 OF 1

APP # 014-353

TRANSFORMER CD #: 01337

SIZE: 0675 0

MODE: X (A, C, D, F, R)

PD #:

OUNT: 515

JOB #:

DATE:

SERIAL #: 00000114426

MFG CODE: 36 FPE

PRI VOLT: 06 12000

SEC VOLT: 01 120/240

BUSHINGS: 02 TWO COVER

TYPE CD: 1 OVERHEAD

CLASS CD: 01 CONVENTIONAL

INSUL CD: 1 OIL

TAP POSN: 3 TAPS 4 6

FUSE SIZE:

PRI PHS: AB

ID NO:

SHOP USE:

USE CD: 00

OWNR CD: 1 PCE OWNED

DIV/YARD: 10 CENTRAL 00

STATUS: 1 ACTIVE - IN SERVICE

SEC BUS: POSN.

OIL (GAL): PCB IN) -50 01 27 87

TAP SETC: 12600 OUT)

%TAPS: 0.0

H I S T O R Y				SECTION NO:	
ACT DATE	JOB #	CD	DESC.	PHASE:	ZIMPEDANCE:
02 26 87	25974	01	INSTALLED	1	1.70
01 23 87	52903	02	REMOVED	2ND HAND: N	WEIGHT(LB):
01 27 87	79910	04	SHIPPED TO SHOP	MAINT: 02 03 87	PURCH: 1962 00
10 28 77	11489	01	INSTALLED	REWIND:	NEW: 1962 00

REMARKS:

COMMAND: P

PAGE: 1 OF 1

MAP #: 000-00

TRANSFORMER CD #: 00287

MOUNT:

SIZE: 0167 0

MODE: X (A), C, D, E, R

JOB #:

PO #:

DATE:

SERIAL #: 00001402916

PRI PHS:

ID NO:

WFG CODE: 11 PENNSYLVANIA

SHOP USE:

PRI VOLT: 12 13200

USE CD: 00

SEC VOLT: 21 277

OWNR CD: 1 PGE OWNED

BUSHINGS: 02 TWO COVER

DIV/YARD: 00 TRANSFORMER SHOP

60

TYPE CD: 1 OVERHEAD

STATUS: 2 INACTIVE - IN STOCK

CLASS CD: 01 CONVENTIONAL

SEC BUS: POSN:

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 01 26 87

TAP POSN: 7 TAPS

TAP SETG: OUT)

FUSE SIZE:

%TAPS: 2.5

H I S T O R Y				SECTION NO:	
APP DATE	JOB #	CD	DESC.	PHASE:	1
10 06 86	81326	02	REMOVED	2ND HAND:	N
01 38 87	99960	04	SHIPPED TO SHOP		
0 23 87	48551	02	REMOVED	MAINT:	02 45 87
0E 24 85	72191	01	INSTALLED	REWIND:	
				NEW:	1963 00

REMARKS:

PRINTED BY E62620

COMMAND: P PAGE 1 OF 1 MAP #: 024 48  
TRANSFORMER CD #: 17393 MOUNT: 4689  
SIZE: 0025 0 MODE: X (A, C, D, P, R) JOB #:   
PO #: DATE:   
PRI PHS: C ID NO:   
SHOP USE:   
USE CD: 00  
OWNER CD: 1 PGE OWNED  
DIV/YARD: 40 WESTERN 00  
STATUS: 1 ACTIVE - IN SERVICE  
SEC BUS: POSN.  
OIL(GAL): PCB IN) -50 01 20 87  
TAP SETG: OUT)  
XTAPS: 0.0  
#TAPS: 0 SECTION NO:  
PHASE: 1 XIMPEDANCE: 2.10  
2ND HAND: N WEIGHT(LB):

SERIAL #: 00003427253  
MFG CODE: 03 ALLIS CHALMERS  
PRI VOLT: 03 7200  
SEC VOLT: 01 120/240  
BUSHINGS: 01 SINGLE COVER  
TYPE CD: 1 OVERHEAD  
CLASS CD: 11 CONVENTIONAL FUSED  
INSUL CD: 1 OIL  
TAP POSN: 1 NO TAP  
FUSE SIZE:   
H I S T O R Y

ACT DATE	JOB #	CD	DESC.	MAINT	REWHND	PURCH	NEW
02 18 87	53211	01	INSTALLED				
07 28 86	99940	04	SHIPPED TO SHOP				
01 19 87	99950	04	SHIPPED TO SHOP	02 05 87		15.2 00	
12 23 86	01192	02	REMOVED				1962 00

REMARKS:



COMMAND: P PAGE 1 OF 1 MAP #: 000 00  
TRANSFORMER CD #: 17585 MOUNT:  
SIZE: 0025 0 CODE: X (A, C, D, P, R) JOB #:  
PO #:

SERIAL #: 00002027915 PRI PHS ID NO:  
MFG CODE: 06 MOLONEY SHOP USE: 53 BURNED-OUT TRANSFORMER  
PRI VOLT: 03 7200 USE CD: 00  
SEC VOLT: 01 120/240 QUNR CD: 1 PCC OWNED  
DUSHINGS: 01 SINGLE COVER DIV/YARD: 00 TRANSFORMER SHOP 10  
TYPE CD: 1 OVERHEAD STATUS: 3 INACTIVE - IN PROCESS  
CLASS CD: 11 CONVENTIONAL FUSED SEC BUS POSN:  
INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 01 28 87  
TAP POSN: 1 NO TAP TAP SETG: 010  
FUSE SIZE: STAPS: 0.0

H I S T O R Y STAPS: 0 SECTION NO:  
ACT DATE JOB # CD DESC. PHASE: 1 ZIMPEDANCE: 1.60  
01 25 87 10027 03 REMOVED 2ND HAND: N WEIGHT(LB):  
01 28 87 99910 04 SHIPPED TO SHOP  
12 30 74 32530 01 INSTALLED PAINT: PURCH: 1965 00  
12 10 86 99940 04 SHIPPED TO SHOP REWIND: NEW: 1965 00

REMARKS:

COMMAND: P PAGE: 1 OF 1 MAP: 030-228  
 TRANSFORMER CO #: 19177 MOUNT: 2557  
 SIZE: 6025 0 MODE: X (A, C, D, P, R) JOB #:   
 PO #: DATE:

SERIAL #: 00003617717 PRI PHS: A ID NO:   
 MFG CODE: 03 ALLIS CHALMERS SHOP USE:   
 PRE VOLT: 03 7200 USE CD: 00  
 SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
 BUSHINGS: 01 SINGLE COVER DIV/YARD: 20 WILLAMETTE VALLEY 00  
 TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
 CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 01 28 87  
 TAP POSN: 1 NO TAP TAP SETC: (OUT)  
 FUSE SIZE: XTAPS: 0.0

H I S T O R Y  
 ACT DATE JOB # CD DESC. | PHASE: 1 SECTION NO:  
 08 18 87 49444 01 INSTALLED | 2ND HAND: N ZIMPEDANCE: 1.50  
 01 28 87 99926 0A SHIPPED TO SHOP  
 01 21 87 47317 02 REMOVED | MAINT: 02 05 87 PURCH: 1944 00  
 01 24 89 63390 01 INSTALLED | REWIND: NEW: 1944 00  
 REMARKS:

PRINTED BY E62620

M47155

COMMAND: P PAGE 1 OF 1 MAP # 000-00  
 TRANSFORMER CD #: 30416 MOUNT:  
 SIZE: 0025 0 MODE: X-(A, C, D, P, R) JOB #:  
 PO #:

SERIAL #: 00609377114 PRI PHS: ID NO:  
 MFG CODE: 11 PENNSYLVANIA SHOP USE:  
 PRI VOLT: 06 12000 USE CD: 00  
 SEC VOLT: 01 120/240 OWNER CD: 1 PGE OWNED  
 BUSHINGS: 02 TWO COVER DIV/YARD: 00 TRANSFORMER SHOP 10  
 TYPE CD: 1 OVERHEAD STATUS: 2 INACTIVE - IN STOCK  
 CLASS CD: 01 CONVENTIONAL SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(EAL): PCB IN) -50 01 27 87  
 TAP POSN: 7 TAPS TAP SETC: OUT)  
 FUSE SIZE: XTAPS: 2.5

H I S T O R Y  
 ACT DATE JOB # CD DESC. PHASE: 1 SECTION NO:  
 07 28 86 99940 04 SHIPPED TO SHOP 2ND HAND: N WEIGHT(LB):  
 01 23 87 52803 02 REMOVED  
 01 27 87 99910 04 SHIPPED TO SHOP MAIN: 02 04 87 PURCH: 1964 00  
 10 28 77 11489 01 INSTALLED REWIND: NEW: 1964 00  
 REMARKS:

UPDTE

## TRANSFORMER MASTER UPDATE

12-17-87 T#P381

MAT155

PRINTED BY: E62610

COMMAND: P

PAGE 1 OF 1

HAP #: 011-072

TRANSFORMER CD #: 3049.

MOUNT: 233

SIZE: 0025 0

MODE: X (A, C, D, P, R)

JOB #:

PD #:

DATE:

SERIAL #: 0F68910263K

PRI FMS: B

ID NO:

MFG CODE: 01 G. E.

SHOP USE:

PRI VOLT: 03 12000

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 02 TWO COVER

DIV/YARD: 10 CENTRAL

00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 01 CONVENTIONAL

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 01 27 87

TAP POSN: 7 - TAPS

TAP SET: 11100 (OUT)

FUSE SIZE:

%TAPS: 2.5

## H I S T O R Y

#TAPS: 4

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

%IMPEDANCE: 1.90

05 15 87 10411 01 INSTALLED

2ND HAND N

WEIGHT (LB):

11 14 86 81135 02 REMOVED

01 20 87 53619 02 REMOVED

MAINT: 02 05 87

PURCH: 1964 00

01 27 87 99910 04 SHIPPED TO SHOP

REWIND:

NEW: 1964 00

REMARKS:



PRINTED BY E67.20

COMMAND: P PAGE 1 OF 1 MAP #: 011-090  
 TRANSFORMER CO #: 38442 MOUNT: 160  
 SIZE: 0025 0 MODE: X (A, C, D, P, R) JOB #:   
 PO #: DATE:   
 PRI PHS: A ID NO:   
 SHOP USE:   
 USE CD: 00  
 OWNER CD: 1 PGE OWNED  
 DIV/YARD: 40 WESTERN 00  
 STATUS: 1 ACTIVE - IN SERVICE  
 SEC BUS: POSN.  
 OIL (GAL): PCB IN) -50 01 30 87  
 TAP SETC: OUT)  
 ZTAPS: 0.0  
 ATAPS: 0 SECTION NO:  
 PHASE: 1 XIMPEDANCE: 2.50  
 2ND HAND: N WEIGHT (LB):  
 MAINT: 02 06 87 PURCH: 1975 00  
 REWIND: NEW: 1975 00

SERIAL #: 000075AF320  
 MFG CODE: 02 WESTINGHOUSE  
 PRI VOLT: 03 7200  
 SEC VOLT: 01 120/240  
 BUSHINGS: 01 SINGLE COVER  
 TYPE CD: 1 OVERHEAD  
 CLASS CD: 11 CONVENTIONAL-FUSED  
 INSUL CD: 1 OIL  
 TAP POSN: 1 NO TAP  
 FUSE SIZE:

H I S T O R Y

ACT DATE	JOB #	CD	DESC.
02 26 87	26927	01	INSTALLED
08 13 85	58410	01	INSTALLED
01 30 87	07504	05	REINSTATEMENT
12 15 84	06765	07	RETIRED WHOLE TRFMR

REMARKS

NOTED BY E. J. COOPER

SERIAL #: N430718YB0A	PRI PMS : C	ID NO:
MFG CODE: 01 G. E.	SHOP USE:	
PRI VOLT: 03 7200	USE CD : 00	
SEC VOLT: 01 120/240	OWNR CD : 1	PGE OWNED
BUSHINGS: 01 SINGLE COVER	DIV/YARD: 40	WESTERN 00
TYPE CD: 1 OVERHEAD	STATUS : 1	ACTIVE - IN SERVICE
CLASS CD: 11 CONVENTIONAL-FUSED	SEC BUS : POSN.	
INSUL CD: 1 OIL	OIL(GAL):	PCB IN) -50 12 22 86
TAP POSN: 1 NO TAP	TAP SETG: (OUT)	
FUSE SIZE:	XTAPS: 0.0	

H I S T O R Y				#TAPS: 0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	IMPEDANCE: 2.40
08-23-87	53-21	01	INSTALLED	2ND HAND: N	WEIGHT(LB):
12-23-86	99950	04	SHIPPED TO SHOP		
10-15-84	81059	02	REMOVED	MAINT: 02-06-87	PURCH: 1983-00
12-01-83	06578	01	INSTALLED	REWIND:	NEW: 1983-00
REMARKS:					

UPOTE

TRANSFORMER MASTER UPDATE

12-17-87 TOPSOK

M47155

PRINTED BY L61620

COMMAND: P PAGE 1 OF 1 MAP #: 000-00  
 TRANSFORMER CD #: 01904 MOUNT:  
 SIZE: 0037 5 MODE: X (A, C, O, P, R) JOB #:  
 PD #: DATE:

SERIAL #: 00006320678 PRI PMS: ID NO:  
 MFG CODE: 02 WESTINGHOUSE SHOP USE:  
 PRI VOLT: 06 12000 USE CD: 00  
 SEC VOLT: 04 240/480 OWNER CD: 1 PGE OWNED  
 BUSHINGS: 02 TWO COVER DIV/YARD: 00 TRANSFORMER SHOP 50  
 TYPE CD: 1 OVERHEAD STATUS: 2 INACTIVE - IN STOCK  
 CLASS CD: 01 CONVENTIONAL SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL (GAL): PCB IN: -50 01 26 87  
 TAP POSN: 3 TAPS: 4 & TAP SETG: OUT)  
 FUSE SIZE: XTAPS: 2.5

H I S T O R Y				#TAPS: 4	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	XIMPEDANCE: 2.20
05 11 72	05139	01	INSTALLED	2ND HAND: N	WEIGHT (LB):
01 26 87	92950	04	SHIPPED TO SHOP		
01 16 87	81470	02	REMOVED	MAINT: 02 04 37	BURCH: 1953 00
06 15 84	04847	01	INSTALLED	REWIND	NEW: 1953 00

REMARKS:

PRINTED BY E62629

047152

COMMAND # PAGE 4 OF 4 TAP # 000-00  
 TRANSFORMER CO #: 01206 MOUNT:  
 SIZE: 0037-5 MODE: X-(A, C, D, P, R) JOB #:  
 PD #:

SERIAL #: 0000635536 PRI PHS ID NO:  
 MFG CODE: 02 WESTINGHOUSE SHOP USE:  
 PRI VOLT: 06 12000 USE CD: 00  
 SEC VOLT: 04 240/480 OWNER CD: 1 PGE OWNED  
 BUSHINGS: 02 TWO COVER DIV/YARD: 00 TRANSFORMER SHOP 50  
 TYPE CD: 1 OVERHEAD STATUS: 2 INACTIVE - IN STOCK  
 CLASS CD: 01 CONVENTIONAL SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(GAL): PCB IN) -50 01 26 87  
 TAP POSN: 3 TAPS + & TAP SETG: OUT)  
 FUSE SIZE: %TAPS: 2.5

H I S T O R Y  
 ACT DATE JOB # CD DESC. #TAPS: 4 SECTION NO:  
 01 26 87 99950 04 SHIPPED TO SHOP PHASE: 1 %IMPEDANCE: 2.20  
 01 16 87 01470 02 REMOVED 2ND HAND: N WEIGHT(LB):  
 04 15 84 04847 01 INSTALLED MAINT: 02 04 87 PURCH: 1953 00  
 04 24 86 72919 02 REMOVED REWIND: NEW: 1953 00

REMARK3:

421787-1#P20K

bioRxiv preprint doi: <https://doi.org/10.1101/151100>; this version posted November 1, 2017. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

UPDATE

TRANSFORMER MASTER UPDATE

12-17-87 TAPSK

PRINTED BY 162420

MAY 1987

COMMAND: P

PAGE 1 OF 1

JOB # 011-448

TRANSFORMER CO #: 30053

COUNT: 5774

SIZE: 0015-0

MODE: X (4, 0, 0, P, R)

JOB #:

FO #:

DATE:

SERIAL #: 00006556376

PRI PHS: C

ID NO:

MFG CODE: 39 HOWARD

OLD 99

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 40 WESTERN

00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL-FUSED

SEC BUS: PGEN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -30 01 26 87

TAP PGEN: 1 NO TAP

TAP SETC: OUT)

FUSE SIZE:

XTAPS: 0.0

## H I S T O R Y

#TAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 2.00

04 15 87 07874 01 INSTALLED

2ND HAND: N

WEIGHT (LB):

05 11 72 05139 01 INSTALLED

01 26 87 09950 04 SHIPPED TO SHOP

MAINT: 02 01 87

PURCH: 1974 00

01 22 87 81552 02 REMOVED

REWIND:

NEW: 1976 00

REMARKS:

NOTE

# TRANSFORMER MASTER UPDATE

12-17-87 TAPSON

M47155

PRINTED BY E62620

COMMAND: P PAGE: 1 OF 1 MAP #: 021-110  
 TRANSFORMER CD #: 35799 MOUNT: 2228  
 SIZE: 0015 6 MODE: X (A, C, D, F, R) JOB #:   
 PO #: DATE:   
 PRI PHS: C ID NO:   
 SHOP USE:   
 USE CD: 00  
 OWNR CD: 1 PGE OWNED  
 DIV/YARD: 40 WESTERN 00  
 STATUS: 1 ACTIVE - IN SERVICE  
 SEC BUS: POSN.  
 OIL (GAL): PCB IN: -50 01 28 87  
 TAP SETC: OUT)  
 ZTAPS: 0.0  
 #TAPS: 0 SECTION NO:  
 PHASE: 1 XIMPEDANCE: 1.70  
 2ND HAND: N WEIGHT (LB):  
 MAINT: 02 04 87 PURCH: 1980 00  
 REMIND: NEW: 1980 00

SERIAL #: 00792018311-  
 MFG CODE: 25 R. T. E.  
 PRI VOLT: 03 7200  
 SEC VOLT: 01 120/240  
 FUSINGS: 01 SINGLE COVER  
 TYPE CD: 1 OVERHEAD  
 CLASS CD: 11 CONVENTIONAL-FUSED  
 INSUL CD: 1 OIL  
 TAP POSN: 1 NO TAP  
 FUSE SIZE:   
 HISTO R Y  
 ACT DATE JOB # CD DESC. I  
 03 18 87 27326 01 INSTALLED  
 04 22 87 10131 02 REMOVED  
 04 28 87 95260 04 SHIPPED TO SHOP  
 10 10 80 74763 01 INSTALLED  
 REMARKS:

PRINTED BY P-2220

M47:55

COMPANY: B PAGE 1 OF 1 MAP #: B44-010  
 TRANSFORMER CD #: 02938 MOUNT: 417  
 SIZE: 0025 0 MODE: X-(A, C, D, P, R) JOB #:   
 PO #: DATE:

SERIAL #: 00003939084 PRI PHS: A ID NO:   
 MFG CODE: 02 WESTINGHOUSE SHOP USE:   
 PRI VOLT: 02 2400 USE CD: 00   
 SEC VOLT: 01 120/240 OWNER CD: 1 PGE OWNED   
 WISINGS: 03 SIDE WALL DIV/YARD: 10 CENTRAL 00   
 TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE   
 CLASS CD: 01 CONVENTIONAL SEC BUS: POSN.   
 INSUL CD: 1 OIL OIL(GAL): PCB IN) -50 01 28 87   
 TAP POSN: 1 NO TAP TAP SETG: OUT)   
 FUSE SIZE: STAPS: 0.0

H-I-S-T-O-R-Y STAPS: 0 SECTION NO:   
 ACT DATE JOB # CD DESC. PHASE: 1 %IMPEDANCE: 2.50   
 03 09 87 10301 01 INSTALLED 2ND HAND: N WEIGHT(LB):   
 01 25 87 27057 02 RECYCLED   
 01 28 87 99910 04 SHIPPED TO SHOP MAINT: 05 04 87 PURCH: 1947 00   
 06 16 71 24858 01 INSTALLED REWIND: NEW: 1947 00

REMARKS:

PRINTED BY E62670

COMMAND P PAGE 01 MAP # 011-000  
TRANSFORMER CD #: 03494 MOUNT: 80  
SIZE: 0025 0 MODE: X (A, C, D, P, R) JOB #  
PO #: DATE:

SERIAL #: 00003936632 PRI PHS: A ID NO  
MFG CODE: 02 WESTINGHOUSE SHOP USE: 00  
PRI VOLT: 02 2400 USE CD: 00  
SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
BUSHINGS: 03 SIDE WALL DIV/YARD: 00 TRANSFORMER SHOP 10  
TYPE CD: 1 OVERHEAD STATUS: 3 INACTIVE - IN PROCESS  
CLASS CD: 01 CONVENTIONAL SEC BUS: POSN.  
INSUL CD: 1 OIL OIL (GAL): PCB IN) -40 12 97 87  
TAP POSN: 1 NO TAP TAP SETG: OUT)  
FUSE SIZE: XTAPS: 0.0

H I S T O R Y				XTAPS:	0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE:	1	ZIMPEDANCE: 2.90
12 07 87	99910	04	SHIPPED TO SHOP	2ND HAND:	N	WEIGHT(LB):
04 26 87	10459	01	INSTALLED			
01 30 87	10111	02	REMOVED	MAINT:	02 06 87	PURCH: 1947 00
01 17 88	06134	01	INSTALLED	REWIND:		NEW: 1947 00

REMARKS:

COMMAND: T PAGE 1 OF 1 MAP # 844-120  
TRANSFORMER CD #: 04063 MOUNT. 394  
SIZE: 0025 9 MODE: X (A, C, D, P, R) JOB #:  
PO #:

SERIAL #: 00004153424 PRI PHS: A ID NO:  
MFG CODE: 02 WESTINGHOUSE SHOP USE:  
PRI VOLT: 02 2400 USE CD: 00  
SEC VOLT: 01 120/240 OWNER CD: 1 PGE OWNED  
BUSHINGS: 03 SIDE WALL DIV/YARD: 10 CENTRAL 00  
TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
CLASS CD: 01 CONVENTIONAL SEC BUS: POSN  
INSUL CD: 1 OIL OIL (GAL): PCB IN) 46 0: 22 87  
TAP POSN: 1 NO TAP TAP SETG: OUT)  
FUSE SIZE: XTAPS: 0.0

H I S T O R Y				#TAPS: 0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	IMPEDANCE: 2.80
06 04 87	10531	01	INSTALLED	2ND HAND: N	WEIGHT (LB):
05 06 87	99910	04	SHIPPED TO SHOP		
11 10 86	26828	02	REMOVED	MAINT 02 05 87	PURCH: 1948 00
12 12 86	99910	04	SHIPPED TO SHOP	REWIND:	NEW: 1948 00
REMARKS:					

COMMAND: P PAGE 1 OF 1 MAP # 661-358  
TRANSFORMER CD #: 09303 MOUNT: 421  
SIZE: 0925-0 MODE X (A, C, D, P, R) JOB #  
CD #: DATE:  
SERIAL #: 00000036969 PRI PHS: A ID NO:  
MFG CODE: 07 KUHLMAN SHOP USE:  
PRI VOLT: 03 7200 USE CD: 00  
SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
BUSHINGS: 01 SINGLE COVER DIV/YARD: 20 WILLAMETTE VALLEY 00  
TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
INSUL CD: 1 OIL OIL (GAL): PCB IN: -50 01 26 87  
TAP POSN: 1 NO TAP TAP SETG: OUT)  
FUSE SIZE: XTAPS: 0.0

H I S T O R Y  
ACT DATE JOB # CD DESC. PHASE: 1 SECTION NO:  
03 10 87 48234 01 INSTALLED 2ND HAND: N WEIGHT(LB):  
01 26 87 99950 04 SHIPPEL TO SHOP MAINT: 02 05 87 PURCH: 1955 00  
04 20 87 31477 02 REMOVED REMINO: NEW: 1955 00  
04 20 85 09270 01 INSTALLED  
REMARKS:

PRINTED BY E62630

COMMAND: P PAGE 1 OF 1 TAP # 000-00  
TRANSFORMER CD #: 09650 MOUNT:  
SIZE: 0025 0 MODE: X (A, C, D, P, R) JOB #:  
PD #:

SERIAL #: 000855D0926 PRI PHS: ID NO:  
MFG CODE: 02 WESTINGHOUSE SHOP USE: 53 BURNED-OUT TRANSFORMER  
PRI VOLT: 03 7200 USE CD: 00  
SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
BUSHINGS: 01 SINGLE COVER DIV/YARD: 00 TRANSFORMER SHOP 40  
TYPE CD: 1 OVERHEAD STATUS: 3 INACTIVE - IN PROCESS  
CLASS CD: 11 CONVENTIONAL FUSED SEC BUS: POSN.  
INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 01 27 87  
TAP POSN: 1 NO TAP TAP SETC: OUT)  
FUSE SIZE: XTAPS: 0.0

H I S T O R Y				SECTION NO:			
ACT DATE	JOB #	CD	DESC.	PHASE:	1	IMPEDANCE:	2.20
01 22 87	53127	02	REMOVED	2ND HAND:	N	WEIGHT(LB):	
01 27 87	99940	04	SHIPPED TO SHOP				
01 19 88	62225	01	INSTALLED	MAINT:		BURCH:	1955 00
01 07 72	26302	01	INSTALLED	REWIND:		NEW:	1955 00

REMARKS:

PRINTED BY F62620

COMMAND: P

PAGE: 1 OF 1

MAP #: 073-05

TRANSFORMER CD #: 10112

MOUNT: 2281

SIZE: 0925 0

MODE: X (A, C, D, F, R)

JOB #:

PO #:

DATE:

SERIAL #: 00001561393

PRI PWS: A

ID NO:

MFG CODE: 04 LINE MATERIAL

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 60 OREGON CITY 00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL-FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 01 28 87

TAP POSN: 1 NO TAP

TAP SETG: OUT)

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y				STAPS: 0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	%IMPEDANCE: 2.40
05-13-87	10694	01	INSTALLED	2ND HAND: N	WEIGHT (LB):
11-17-86	27854	02	REMOVED		
04-26-87	16147	02	REMOVED	MAINT 02 05 87	PURCH: 1935 00
01-20-87	99910	04	SHIPPED TO SHOP	REWIND:	NEW: 1935 00
REMARKS:					

PRINTED BY R42320

M47155

COMMAND: 2 PAGE 4 OF 4 NAF #: 011-353  
 TRANSFORMER CD #: 10135 MOUNT 6792  
 SIZE: 0035 0 MODE: X (A, C, D, P, R) JOB #:   
 PD #: DATE:   
 PRI PHS: C ID NO:   
 SHOP USE:   
 USE CD: 00  
 OWNER CD: 1 PGE OWNED  
 DIV/YARD: 40 WESTERN 06  
 STATUS: 1 ACTIVE - IN SERVICE  
 SEC BUS: POSN.  
 OIL (GAL): PCB IN) -50 01 30 87  
 TAP SETS: OUT)  
 XTAPS: 0.0  
 STAPS: 0 SECTION NO:  
 PHASE: 1 XIMPEDANCE: 2.40  
 2ND HAND: N WEIGHT (LB):

SERIAL #: 000000C55188  
 MFC CODE: 07 KUHLMAN  
 PRI VOLT: 03 7200  
 SEC VOLT: 01 120/240  
 DUSHINGS: 01 SINGLE COVER  
 TYPE CD: 1 OVERHEAD  
 CLASS CD: 11 CONVENTIONAL FUSED  
 INSUL CD: 1 OIL  
 TAP POSN: 1 NO TAP  
 FUSE SIZE:

H I S T O R Y			
ACT DATE	JOB #	CD	DESC.
07-15-87	53875	01	INSTALLED
09-04-86	99910	04	SHIPPED TO SHOP
04-25-87	97894	02	REMOVED
01-30-87	99910	04	SHIPPED TO SHOP

REMARKS:

MAINT: 02 04 87 BURCH: 1955 00  
 REWIND: NEW: 1935 00

PRINTED BY E63620

[illegible]

UPDATE

## TRANSFORMER MASTER - UPDATE

12-17-87 T4P38K

MAY 35

PRINTED BY E62620

COMMAND: P PAGE 1 OF 1 MAP # 041-080  
TRANSFORMER CO #: 14105 MOUNT: 155  
SIZE: 0025 0 MODE: X (A, C, D, P, R) JOB #:  
PO #:  
DATE:  
ID NO:  
SERIAL #: 000000085402 PRI PHS: A  
MFG CODE: 07 KUHLMAN SHOP USE:  
PRI VOLT: 03 7200 USE CD: 00  
SEC VOLT: 01 120/240 OWNER CD: 1 PGE OWNED  
BUSHINGS: 01 SINGLE COVER DIV/YARD: 40 WESTERN 00  
TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
INSUL CD: 1 OIL OIL(CAL): PCB IN: -50 12 19 86  
TAP POSN: 1 NO TAP TAP SETG: OUT)  
FUSE SIZE: XTAPS: 0.0  
HISTORY  
ACT DATE JOB # CD DESC. | #TAPS: 0 SECTION NO:  
02 19 87 53235 04 INSTALLED | PHASE: 1 XIMPEDANCE: 2.40  
12 17 86 27976 02 REMOVED | 2ND HAND: N WEIGHT(LB):  
12 19 86 99910 04 SHIPPED TO SHOP | MAINT: 02 04 87 PURCH: 1957 00  
03 18 87 05784 01 INSTALLED | REWIND: NEW: 1957 00  
REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

12-17-87 T4PSSK

H47-55

PRINTED BY E63Y20

COMMAND: P

PAGE 1 OF 1

MAP #: 014-32P

TRANSFORMER CD #: 18V87

MOUNT: 1240

SIZE: 0010 0

MODE: X (A, C, D, P, R)

JOB #:

PO #:

DATE:

SERIAL #: 0000338098

PRI PHS:

B

ID NO:

MFG CODE: 03 ALLIS CHALMERS

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 50 GRESHAM

00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN: -50 01 28 87

TAP POSN: 1 NO TAP

TAP SETS: OUT)

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y

ATAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 2.80

04 22 87 81818 01 INSTALLED

2ND HAND: N

WEIGHT (LB):

01 12 87 40018 02 REMOVED

04 23 87 22920 04 SHIPPED TO SHOP

MAINT: 02 04 87

PURCH: 1944 00

06 12 87 00000 01 INSTALLED

REWIND:

NEW: 1944 00

REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

12-17-87 TAPSEK

PRINTED BY 867620

M47153

COMMAND: P

PAGE: 1 OF 1

TAP # 000-00

TRANSFORMER CO #: 19588

MOUNT:

SIZE: 0010 0

MODE: X (A, C, E, P, R)

JOB #:

PO #:

DATE:

SERIAL #: 0000F253434

PRI PHG:

ID NO:

MFG CODE: 01 G. E.

SHOP USE: 53 BURNED-OUT TRANSFORMER

PRI VOLT: 05 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 00 TRANSFORMER SHOP 20

TYPE CD: 1 OVERHEAD

STATUS: 3 INACTIVE - IN PROCESS

CLASS CD: 10 THERMAL OVLD INDC-FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL(GAL): PCB IN) -50 01 28 87

TAP POSN: 1 NO TAP

TAP SETG: OUT)

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y

#TAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

%IMPEDANCE: 1.60

01 20 87 99920 04 SHIPPED TO SHOP

2ND HAND: N

WEIGHT(LB):

01 24 87 48552 02 REMOVED

12 20 82 49125 01 INSTALLED

MAINT:

PURCH: 1962 00

12 23 86 99920 04 SHIPPED TO SHOP

REWIND:

NEW: 1962 00

REMARKS:

COMMAND: F PAGE 1 OF 1 TAP # 000-00  
 TRANSFORMER CD #: 22189 MOUNT:  
 SIZE: 0010 0 MODE: X (A, C, I, P, R) JOB #:  
 PD #:

SERIAL #: 0065AM10653 PRI PHS: ID NO:  
 WFC CODE: 02 WESTINGHOUSE SHOP USE: 53 BURNED-OUT TRANSFORMER  
 PRI VOLT: 03 7200 USE CD: 00  
 SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
 BUSHINGS: 01 SINGLE COVER DIV/YARD: 00 TRANSFORMER SHOP 50  
 TYPE CD: 1 OVERHEAD STATUS: 3 INACTIVE - IN PROCESS  
 CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 01 26 87  
 TAP POSN: 1 NO TAP TAP SETC: OUT)  
 FUSE SIZE: XTAPS: 0.0

H I S T O R Y				SECTION NO:	
ACT DATE	JOB #	CD	DESC.	PHASE:	1
01 26 87	99950	04	SHIPPED TO SHOP	2ND HAND:	N
01 21 87	80462	07	REMOVED		
04 27 88	81172	01	INSTALLED		
				MAINT:	PURCH: 1966 00
				REWIND:	NEW: 1966 00

REMARKS:

PRINTED BY E63620

COMMON: P PAGE 1 OF 1 MAP #: D15 321  
 TRANSFORMER CD # 28670 MOUNT: 150  
 SIZE: 0010 0 MODE: X (A, C, D, E, R) JOB #:   
 PD #: DATE:   
 PRI PHS: C ID NO:   
 SHOP USE:   
 USE CD: 00

SERIAL #: 0K497764K72  
 MFG CODE: 01 G. E.  
 PRI VOLT: 03 7200  
 SEC VOLT: 01 120/240  
 BUSHINGS: 01 SINGLE COVER  
 TYPE CD: 1 OVERHEAD  
 CLASS CD: 11 CONVENTIONAL-FUSED  
 INSUL CD: 1 OIL  
 TAP POSN: 7 TAPS  
 FUSE SIZE:   
 OWNER CD: 1 PGE OWNED  
 DIV/YARD: 50 GRESHAM 00  
 STATUS: 1 ACTIVE - IN SERVICE  
 SEC BUS: POSN.  
 OIL (GAL): PCB IN) -50 01 27 87  
 TAP SETG: 7200 OUT)  
 XTAPS: 2.5

H I S T O R Y  
 ACT DATE JOB # CD DESC. | #TAPS: 4 SECTION NO:  
 05-10-87 81894 01 INSTALLED | PHASE: 1 ZIMPEDANCE: 1.60  
 01-27-87 99940 04 SHIPPED TO SHOP | 2ND HAND: N WEIGHT (LB):  
 10-31-86 69279 02 REMOVED | MAINT: 02 04 87 PURCH: 1972 00  
 07-19-73 52892 01 INSTALLED | REWIND: NEW: 1972 00

REMARKS:

UPDATE

TRANSFORMER MASTER UPDATE

12-17-87 TAPSOCK

PRINTED BY E63320

NAT:BT

COMMAND P

PAGE 1 OF 1

MAP #: 844-27

TRANSFORMER CD #: 07363

MOUNT: 750

SIZE: 0015 0

ALOE: X (A, C, D, F, R)

JOB #:

PD #:

DATE:

SERIAL #: 00001318778

PRI FHS: C

ID NO:

MFG CODE: 06 MOLONEY

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNER CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 40 WESTERN

00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL-FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 12 22 86

TAP POSN: 7 - TAPS

TAP SETG: 7200 OUT)

FUSE SIZE:

XTAPS: 2.5

## H I S T O R Y

#TAPS: 4

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 2.40

05-13-87 53391 01 INSTALLED

2ND HAND: N

WEIGHT(LB):

12-22-86 99950 04 SHIPPED TO SHOP

12-15-86 81012 02 REMOVED

MAINT: 02 06 87

PURCH: 1953 00

06-12-84 08633 01 INSTALLED

REWIND:

NEW: 1953 00

REMARKS:

PRINTED BY E62620

H47:55

COMMAND P PAGE 1 OF 1 MAP # C14-043  
 TRANSFORMER CO #: 08176 MOUNT: 4463  
 SIZE: 6013 0 MODE: X (A, C, D, P, R) JOB #:  
 PO #:

SERIAL #: 00001335811 PRI PMS: C ID NO:  
 MFG CODE: 04 LINE MATERIAL SHOP USE:  
 PRI VOLT: 03 7200 USE CD: 00  
 SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
 BUSHINGS: 01 SINGLE COVER DIV/YARD: 40 WESTERN 00  
 TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
 CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 12 15 86  
 TAP POSN: 7 TAPS TAP SETS: 7200 OUT)  
 FUSE SIZE: XTAPS: 2.5

H I S T O R Y  
 ACT DATE JOB # CD DESC. PHASE: 1 SECTION NO:  
 04 15 87 07871 01 INSTALLED 2ND HAND: N WEIGHT(LB):  
 12 15 86 99950 04 SHIPPED TO SHOP  
 12 10 86 81313 02 REMOVED MAINT: 02 05 87 PURCH: 1954 00  
 06 21 54 88142 01 INSTALLED REWIND: NEW: 1954 00  
 REMARKS:

UPDATE

TRANSFORMER MASTER - UPDATE

12-17-87 T4P388

PRINTED BY E63220

M47155

COMMAND: P

PAGE 1 OF 1

MAP #: 035-050

TRANSFORMER CD #: 06330

MOUNT: 804

SIZE: 00-5 0

MODE: Y (A, C, D, F, R)

JOB #:

ID #:

DATE:

SERIAL #: 000000C16243

PRI PHS: C

ID NO:

MFG CODE: 07 KUHLMAN

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 50 GRESHAM

00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN) -50 01 16 87

TAP POSN: 1 NO TAP

TAP SETG: OUT)

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y

#TAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

ZIMPEDANCE: 2.60

03-11-87 01429 01 INSTALLED

2ND HAND: N

WEIGHT(LB):

10-23-86 66428 02 REMOVED

01-16-87 99946 04 SHIPPED TO SHOP

MAINT: 02 06 07

PURCH: 1954 00

01-08-87 27931 02 REMOVED

REWIND:

NEW: 1954 00

REMARKS:



COMMAND: P PAGE 1 OF 1 MAP #: 000-00  
 TRANSFORMER CD #: 12498 MOUNT:  
 SIZE: 0015-0 MODE: X (A, G, D, P, R) JOB #:  
 PD #:

SERIAL #: 0000E241999 PRI PHS: ID NO:  
 MFG CODE: 01 G. E. SHOP USE: 53 BURNED-OUT TRANSFORMER  
 PRI VOLT: 03 7200 USE CD: 00  
 SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
 BUSHINGS: 01 SINGLE COVER DIV/YARD: 00 TRANSFORMER SHOP 40  
 TYPE CD: 1 OVERHEAD STATUS: 3 INACTIVE - IN PROCESS  
 CLASS CD: 02 BREAKER CP SEC BUS: POSN.  
 INSUL CD: 1 OIL OIL (GAL): PCB IN: -50 01 27 87  
 TAP POSN: 1 NO TAP TAP SETG: OUT)  
 FUSE SIZE: XTAPS: 0.0

H I S T O R Y  
 ACT DATE JOB # CD DESC. PHASE: 1 SECTION NO:  
 01 20 87 66915 02 REMOVED 2ND HAND: N XIMPEDANCE: 2.40  
 01 27 87 99940 04 SHIPPED TO SHOP HEIGHT (LB):  
 12 28 87 52344 01 INSTALLED MAINT: PURCH: 1959 00  
 12 10 86 99920 04 SHIPPED TO SHOP REWIND: NEW: 1959 00  
 REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

12-17-87 TAPSEK

44 155

PRINTED BY E62623

COMMAND: P

PAGE 1 OF 1

MAP # 000 00

TRANSFORMER CO #: 14073

MOUNT:

SIZE: 0015 0

MODE: X (A, C, D, F, R)

JOB #:

PO #:

DATE:

SERIAL #: 00005R54164

PRI PH2

ID NO:

MFG CODE: 05 WAGNER

SHOP USE: 53 BURNED-OUT TRANSFORMER

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNR CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 00 TRANSFORMER SHOP 40

TYPE CD: 1 OVERHEAD

STATUS: 3 INACTIVE - IN PROCESS

CLASS CD: 11 CONVENTIONAL FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL(GAL): PCB IN) -50 01 28 87

TAP POSN: 1 NO TAP

TAP SETG: OUT)

FUSE SIZE:

ZTAPS: 0.0

# H I S T O R Y

STAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 2.00

01-28-87 99940 04 SHIPPED TO SHOP

2ND HAND: N

WEIGHT(LB):

01-19-87 48442 02 REMOVED

12-15-87 66701 01 INSTALLED

MAINT:

RESEN 1941 00

REWIND:

NEW: 1941 00

REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

12-17-87 T4P\$8K

M47155

PRINTED BY E62620

COMMAND: P PAGE 1 OF 1 MAP #: 045-06  
 TRANSFORMER CD #: 22098 MOUNT: 215  
 SIZE: 0015 0 MODE: X (A, C, D, P, R) JOB #:   
 PD #: DATE:   
 ID NO:   
 PRI. PHS: A

SERIAL #: 00003169643  
 MFG CODE: 07 KUHLMAN  
 PRI VOLT: 03 7200  
 SEC VOLT: 01 120/240  
 BUSHINGS: 01 SINGLE COVER  
 TYPE CD: 1 OVERHEAD  
 CLASS CD: 44 CONVENTIONAL-FUSED  
 INSUL CD: 1 OIL  
 TAP POSN: 1 NO TAP  
 FUSE SIZE:   
 SHOP USE:   
 USE CD: 00  
 OWNR CD: 1 PGE OWNED  
 DIV/YARD: 50 CRESHAM 00  
 STATUS: 1 ACTIVE - IN SERVICE  
 SEC BUS: POSN.  
 OIL (GAL): PCB IN) -50 01 28 87  
 TAP SETG: OUT:  
 %TAPS: 0.0  
 #TAPS: 0 SECTION NO:  
 PHASE: 1 %IMPEDANCE: 1.30  
 2ND HAND: N WEIGHT(LB):

H I S T O R Y  
 ACT DATE JOB # CD DESC. I PHASE: 1  
 03 02 87 81445 01 INSTALLED I 2ND HAND: N  
 09 23 86 81197 02 REMOVED I  
 01 28 87 99920 04 SHIPPED TO SHOP I MAINT 02 05 87 PUECH: 1971 00  
 01 20 87 48416 02 REMOVED I REWIND: NEW: 1971 00

REMARKS:

PRINTED BY EAC620

COMMAND: F PAGE 1 OF 1 MAP 4: D13-184  
TRANSFORMER CD #: 2274: MOUNT: 3478  
SIZE: 0015 0 MODE: X (A, C, D, F, R) JOB #:   
PO #: DATE:   
ID NO:

SERIAL #: 071VJ220014 PRI PHS: C  
MFG CODE: 33 MCCRAW-EDISON SHOP USE:  
PRI VOLT: 03 7200 USE CD: 00  
SEC VOLT: 01 120/240 OWNR CD: 1 PGE OWNED  
BUSHINGS: 01 SINGLE COVER DIV/YARD: 56 GRESHAM 00  
TYPE CD: 1 OVERHEAD STATUS: 1 ACTIVE - IN SERVICE  
CLASS CD: 11 CONVENTIONAL-FUSED SEC BUS: POSN.  
INSUL CD: 1 OIL OIL(GAL): PCB IN: -50 01 26 87  
TAP POSN: 1 NO TAP TAP SETG: OUT  
FUSE SIZE: XTAPS: 0.0

H I S T O R Y				#TAPS: 0	SECTION NO:
ACT DATE	JOB #	CD	DESC.	PHASE: 1	ZIMPEDANCE: 1.60
03 03 87	81785	01	INSTALLED	2ND HAND: N	WEIGHT(LB):
01 26 87	99950	04	SHIPPED TO SHOP		
01 19 87	81312	02	REMOVED	MAINT: 02 04 87	PURCH: 1272 00
05 17 84	87585	01	INSTALLED	REWIND:	NEW: 1972 00

REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

12-17-87 TAPSEK

PRINTED BY E62620

847153

COMMAND: P

PAGE 1 OF 1

M&P #: 000-00

TRANSFORMER CD #: 25379

MOUNT:

SIZE: 0015 0

MODE: X (A, C, D, P, R)

JOB #:

PO #:

DATE:

SERIAL #: 000643A1687

PRI PHS:

ID NO:

MFG CODE: 01 G. E.

SHOP USE:

PRI VOLT: 03 12000

USE CD: 00

SEC VOLT: 02 120

OWNR CD: 1 PGE OWNED

BUSHINGS: 02 TWO COVER

DIV/YARD: 00 TRANSFORMER SHOP 40

TYPE CD: 1 OVERHEAD

STATUS: 2 INACTIVE - IN STOCK

CLASS CD: 01 CONVENTIONAL

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN: -50 01 28 87

TAP POSN: 7 TAPS

TAP SETG: 14400 OUT

FUSE SIZE:

XTAPS: 2.5

H I S T O R Y

#TAPS: 4

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 1.80

05-06-87 53597 02 REMOVED

2ND HAND: N

WEIGHT (LB):

05-12-87 99940 04 SHIPPED TO SHOP

05-01-87 53540 01 INSTALLED

MAINT: 05 14 87

PURCH: 1964 00

01-13-87 24537 02 REMOVED

REWIND:

NEW: 1964 00

REMARKS: MULT. 4-27-87

UPDIE

## TRANSFORMER MASTER UPDATE

-12-17-87 TAPSRK

M47155

PRINTED BY E62630

COMMAND: P

PAGE 4 OF 4

MAP #: 000-00

TRANSFORMER CD #: 25714

MOUNT:

SIZE: 0015 0

MODE: X (A, C, D, P, R)

JOB #:

PD #:

DATE:

SERIAL #: 00068AF5047

PRI PHASE:

ID NO:

MFG CODE: 02 WESTINGHOUSE

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNER CD: 1 PGE OWNED

BUSHINGS: 02 TWO COVER

DIV/YARD: 00 TRANSFORMER SHOP 10

TYPE CD: 1 OVERHEAD

STATUS: 2 INACTIVE - IN STOCK

CLASS CD: 01 CONVENTIONAL

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL(GAL): FCB IN) -50 01 30 87

TAP POSN: 7 - TAPS

TAP SETG: OUT)

FUSE SIZE:

XTAPS: 2.5

## H I S T O R Y

XTAPS: 4

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE: 1.60

03 04 87 99910 04 SHIPPED TO SHOP

2ND HAND: N

WEIGHT(LB):

01 30 87 10000 02 REMOVED

04 30 87 99910 04 SHIPPED TO SHOP

MAINT: 02 04 87 PURCH: 1968 00

10 25 73 05476 01 INSTALLED

REMAINT: NEW: 1968 00

REMARKS:

UPDTE

TRANSFORMER MASTER UPDATE

42-47-87 T#P58K  
647153

PRINTED BY E62620

COMMAND: P

PAGE 1 OF 1

MAP # 811-100

TRANSFORMER CO #: 27463

MOUNT: 522

SIZE: 0015 0

MODE: X (A, C, D, P, R)

JOB #:

PO #:

DATE:

SERIAL #: 01230000K74

PRI FMS:

ID NO:

MFG CODE: 01 G. E.

SHOP USE:

PRI VOLT: 03 7200

USE CD: 00

SEC VOLT: 01 120/240

OWNER CD: 1 PGE OWNED

BUSHINGS: 01 SINGLE COVER

DIV/YARD: 40 WESTERN 00

TYPE CD: 1 OVERHEAD

STATUS: 1 ACTIVE - IN SERVICE

CLASS CD: 11 CONVENTIONAL FUSED

SEC BUS: POSN.

INSUL CD: 1 OIL

OIL (GAL): PCB IN: -50 01 30 87

TAP POSN: 1 NO TAP

TAP SETG: OUT

FUSE SIZE:

XTAPS: 0.0

H I S T O R Y

XTAPS: 0

SECTION NO:

ACT DATE JOB # CD DESC.

PHASE: 1

XIMPEDANCE 1.60

02 20 87 21549 01 INSTALLED

2ND HAND: N

WEIGHT (LB):

01 30 87 22910 04 SHIPPED TO SHOP

MAINT: 02 06 87

PURCH: 1974 00

11 03 86 52795 02 REMOVED

REMIIND:

NEW: 1974 00

03 06 74 05486 01 INSTALLED

REMARKS:

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

## PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-07

REVIEWED BY: JAY BETTINESKI

CHEMISTRY SUPERVISOR

REPORT DATE: 87-01-15

DAL SAMPLE NO.	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLO TYPE	PCB UG/G	EPA CLASSIFICATION
47-2003-				
13235	35358/15KVA	1260/54/42	35.	NON-PCB
13236	1751/100KVA	----	ND	NON-PCB
13237	10705/25KVA	1260/1254	16.	NON-PCB
13238	1750/100KVA	----	ND	NON-PCB
13239	10455/5KVA	1260	4.	NON-PCB
13240	11015/15KVA	----	ND	NON-PCB
13241	11467/5KVA	----	ND	NON-PCB
13242	32920/15KVA	----	ND	NON-PCB
13243	30522/10KVA	----	ND	NON-PCB
13244	18731/15KVA	1260/1254	11.	NON-PCB
13245	19144/25KVA	1260/1254	5.	NON-PCB
13246	5597/50KVA	----	ND	NON-PCB
13247	38309/25KVA	----	ND	NON-PCB
13248	6235/10KVA	1260/1254	29.	NON-PCB

Logged

A

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-20  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-01-22

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
13456	28086/10KVA	1260	90.	PCB-CONTAM
13457	9193/25KVA	1260	288.	PCB-CONTAM
13458	24108/15KVA	1260	***	
13459	3571/75KVA	-----	ND	NON-PCB
13460	34379/25KVA	1260	***	
13461	8320/15KVA	-----	ND	NON-PCB
13462	T-8527/75KVA	-----	ND	NON-PCB
13463	1061/25KVA	1260	***	
13464	T-8526/75KVA	-----	ND	NON-PCB
13465	9466/25KVA	1260	336.	PCB-CONTAM
13466	9661/50KVA	-----	ND	NON-PCB
13467	5791/37.5KVA	1260	16.	NON-PCB
13468	2312/50KVA	1260/1254	25.	NON-PCB
13469	5991/25KVA	1260	4.	NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-21  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-01-29

DAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLO TYPE	PCB UG/G	EPA CLASSIFICATION
13477	19696/10KVA	1260/1254	24.	NON-PCB
13478	10222/10KVA	1260/1254	38.	NON-PCB
13479	T631/300KVA	----	ND	NON-PCB
13480	7846/5KVA	1260/1254	28.	NON-PCB
13481	17393/25KVA	----	ND	NON-PCB
13482	16935/10KVA	1260/1254	22.	NON-PCB
13483	13198/5KVA	1260/1254	24.	NON-PCB
13484	9763/5KVA	1260/1254	26.	NON-PCB
13485	10956/70AMP	1260/1254	14.	NON-PCB
13486	T8525/75KVA	----	ND	NON-PCB
13487	41693/25KVA	----	ND	NON-PCB
13488	7826/5KVA	1260/1254	19.	NON-PCB
13489	11577/5KVA	1260/1254	25.	NON-PCB
13490	19804/10KVA	1260	1.	NON-PCB

OREGON ANALYTICAL CHEMISTS  
 14655 S. W. 20th CHOLLE PERRY RD  
 BEAVERTON, OREGON 97007  
 TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-26

REVIEWED BY: JAY BETTINESKI

CHEMISTRY SUPERVISOR

REPORT DATE: 87-01-29

QAL SAMPLE NO.	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	ANALYST TYPE	PCB LR/G	EPA CLASSIFICATION
47-2003-				
13547	3666/10KVA	1268/1254	263.	PCB-CONTAIN
13548	719/50KVA	1260/1254	26.	NON-PCB
13549	7100/15KVA	1210	4.	NON-PCB
13550	10539/75KVA	-----	ND	NON-PCB
13551	4063/25KVA	1260/1254	44.	NON-PCB
13552	4813/100KVA	-----	ND	NON-PCB
13553	25607/10KVA	1254	7.	NON-PCB
13554	14487/50KVA	-----	ND	NON-PCB
13555	19301/15KVA	1254	<1.	NON-PCB
13556	33462/15KVA	-----	ND	NON-PCB
13557	7681/75KVA	-----	ND	NON-PCB
13558	25605/10KVA	1254	7.	NON-PCB
13559	7680/75KVA	-----	ND	NON-PCB
13560	24684/25KVA	-----	ND	NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-28  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-06

DAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
	13637	8532/75KVA	----	ND NON-PCB
	13638	4954/100KVA	----	ND NON-PCB
	13639	4955/100KVA	----	ND NON-PCB
	13640	8529/75KVA	----	ND NON-PCB
	13641	8537/75KVA	----	ND NON-PCB
	13642	8528/75KVA	----	ND NON-PCB
1-26	13643 19193	19195/25KVA	1260	2. NON-PCB
	13644	1906/37.5KVA	1260	6. NON-PCB
	13645	7028/5KVA	1260/1254	84. PCB-CONTAM
	13646	8531/75KVA	----	ND NON-PCB
	13647	22741/15KVA	1260/54/42	26. NON-PCB
	13648	1904/37.5KVA	1260	<1. NON-PCB
	13649	14416/5KVA	1260	***
	13650	8765/50KVA	1260/1254	17. NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-28  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-06

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
13651	9884/5KVA	1260/1254	31.	NON-PCB
13652	6835/5KVA	1260/1254	29.	NON-PCB
13653	30055/15KVA	-----	ND	NON-PCB
13654	10975/5KVA	1260/1254	29.	NON-PCB
13655	8479/5KVA	1260/1254	26.	NON-PCB
13656	22189/10KVA	-----	ND	NON-PCB
13657	11018/5KVA	1260/1254	28.	NON-PCB
13658	11836/15KVA	1260/1254	22.	NON-PCB
13659	11014/5KVA	1260/1254	28.	NON-PCB
13660	8530/75KVA	-----	ND	NON-PCB
13661	9503/25KVA	-----	ND	NON-PCB
13662	14425/5KVA	1260/1254	43.	NON-PCB
13663	9564/5KVA	1260/1254	28.	NON-PCB
13664	8330/5KVA	1260/1254	26.	NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

DATE RECEIVED: 87-01-29  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-06

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
13665	16929/25KVA	1260/1254	31.	NON-PCB
13666	7458/10KVA	1260/1254	43.	NON-PCB
13667	8954/10KVA	1260/1254	15.	NON-PCB
13668	30442/25KVA	1260/1254	30.	NON-PCB
13669	5008/25KVA	1260/1254	65.	PCB-CONTAM
13670	14796/15KVA	1260/1254	15.	NON-PCB
13671	24537/25KVA	1260/1242	35.	NON-PCB
13672	1357/75KVA	1260/1254	40.	NON-PCB
13673	28670/10KVA	----	ND	NON-PCB
13674	12498/15KVA	1260	2.	NON-PCB
13675	27653/10KVA	1260/1254	14.	NON-PCB
13676	9650/25KVA	1260/1242	39.	NON-PCB
13677	30416/25KVA	1254/1260	11.	NON-PCB
13678	13196/50KVA	1260/1254	20.	NON-PCB

X  
X  
X  
X  
X

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-01-30  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-06

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLO TYPE	PCB UG/G	EPA CLASSIFICATION
13708	18987/10KVA	1260	1.	NON-PCB
13709	289/167KVA	1260	2.	NON-PCB
13710	19588/10KVA	1260/1254	2.	NON-PCB
13711	14073/15KVA	1260	36.	NON-PCB
13712	25234/50KVA	-----	ND	NON-PCB
13713	22096/15KVA	-----	ND	NON-PCB
13714	19177/25KVA	1254/1260	11.	NON-PCB
13715	26584/10KVA	-----	ND	NON-PCB
13716	287/167KVA	1260	2.	NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-02-02  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-10

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLO TYPE	PCB UG/G	EPA CLASSIFICATION
13839	9466/25KVA	1260	2.	NON-PCB
13840	5257/10KVA	1260	***	
13841	6909/37.5KVA	1260	<1.	NON-PCB
13842	6338/50KVA	1260	12.	NON-PCB
13843	9193/25KVA	1260	<1.	NON-PCB

OREGON ANALYTICAL LABORATORY  
14655 S. W. OLD SCHOLLS FERRY RD  
BEAVERTON, OREGON 97007  
TELEPHONE: (503) 644-5300

PCB TEST REPORT

TRANSFORMER SHOP

DATE RECEIVED: 87-02-03  
REVIEWED BY: JAY BETTINESKI  
CHEMISTRY SUPERVISOR  
REPORT DATE: 87-02-10

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
13845	36442/25KVA	1260/1254	25.	NON-PCB
13846	24690/15KVA	1260/1254	40.	NON-PCB
13847	24577/15KVA	1260/54/42	44.	NON-PCB
13848	17944/25KVA	1260	<1.	NON-PCB
13849	27465/15KVA	-----	ND	NON-PCB
13850	25714/15KVA	1260/54/42	41.	NON-PCB
13851	10126/25KVA	1260	1.	NON-PCB
13852	29061/10KVA	1242/1260	85.	PCB-CONTAIN
13853	15757/50KVA	-----	ND	NON-PCB
13854	7603/5KVA	1260/1254	40.	NON-PCB
13855	7111/10KVA	1260/1254	16.	NON-PCB
13856	T780/500KVA	-----	ND	NON-PCB

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
12874	8195/25KVA	1260/1254	11.	NON-PCB
12875	8176/15KVA	----	ND	NON-PCB
12876	8157/25KVA	1260/1254	62.	PCB-CONTAM
12877	38305/15KVA	----	ND	NON-PCB
12878	20897/25KVA	----	ND	NON-PCB
12879	30307/500KVA	1260/54/42	14.	NON-PCB
12880	5570/10KVA	1260/1242	43.	NON-PCB
12881	37609/140AMP	1260/54/42	31.	NON-PCB
12882	938/75KVA	1260	2.	NON-PCB
12883	17082/15KVA	1260	<1.	NON-PCB
12884	T-913/150KVA	----	ND	NON-PCB
12885	10289/10KVA	1260/1242	91.	PCB-CONTAM
12886	698/75KVA	1260/1254	49.	NON-PCB
12887	T-780/500KVA	----	ND	NON-PCB

*Logged*

ND = NONE DETECTED (<0.5 UG/G)

R.KITCHING, M.SMITH  
CSC CSC ST62

OAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLO TYPE	PCB UG/G	EPA CLASSIFICATION
12999	39408/15KVA	----	ND	NON-PCB
13000	27337/25KVA	----	ND	NON-PCB
13001	16009/15KVA	1260	2.	NON-PCB
13002	11005/25KVA	----	ND	NON-PCB
13003	9491/5KVA	----	ND	NON-PCB
13004	37775/15KVA	----	ND	NON-PCB
13005	T-208/112KVA	1260/1254	13.	NON-PCB
13006	7080/15KVA	1260/54/21	352.	PCB-CONTAM
13007	7363/15KVA	1260/54/42	38.	NON-PCB
13008	46890/25KVA	----	ND	NON-PCB
13009	6309/3KVA	1260/1254	41.	NON-PCB
13010	BOTTLE 3	1242/1260	590,000.	NON-PCB
13011	BOTTLE 4	----	ND	NON-PCB
13012	10289/10KVA	1260	3.	NON-PCB

Logged

ND = NONE DETECTED (<0.5 UG/G)

R.KITCHING, M.SMITH  
CSC CSC ST62

☆

DAL SAMPLE NO. 47-2003-	TRANSFORMER NO. OR SAMPLE IDENTIFICATION	AROCLOR TYPE	PCB UG/G	EPA CLASSIFICATION
12982	24253/15KVA	1260/1254	187.	PCB-CONTAM
12983	27832/10KVA	1260	6.	NON-PCB
12984	8364/37.5KVA	1260	9.	NON-PCB
12985	40146/25KVA	----	ND	NON-PCB
12986	T-111/1500KV	----	ND	NON-PCB
12987	952/37.5KVA	1260	70.	PCB-CONTAM
12988	24135/15KVA	1260	150.	PCB-CONTAM
12989	11785/25KVA	----	ND	NON-PCB
12990	27831/10KVA	1260	8.	NON-PCB
12991	8690/25KVA	1260	13.	NON-PCB
12992	27827/10KVA	1260	88.	PCB-CONTAM
12993	7249/15KVA	1260	15.	NON-PCB
12994	TANK 4	1260/1254	11.	NON-PCB

LOGGED

ND = NONE DETECTED (<0.5 UG/G)

R.KITCHING, M.SMITH  
CSC CSC ST62

NO.: D85034X.R01

PORTLAND GENERAL ELECTRIC CO.

TRANSFORMER SHOP

ANALYTICAL SERVICES

SAMPLE DATA SHEET

E GROUP NO. 47-2003

DESCRIPTION INSUL OIL PCB

DATE LOGGED IN 850117

F SAMPLES 08

NO. OF TESTS 01

B TEST RESULTS

-----S A M P L E S   A N D   T E S T   R E S U L T S-----

DESCRIPTION

3418	3419	3420	3421	3422	3423
1805/25	6260/25	3969/37.5	T-734/500	3494/25	24823/70
850118	850118	850118	850118	850118	850118

7 PCB PPM

48.	<5.	42.	<5.	<u>37.</u>	32.
-----	-----	-----	-----	------------	-----

TELEPHONE MEMO

TO: File  
FROM: Dennis Norton *DNS*  
DATE: February 3, 1988  
SUBJECT: TSCA Violation Telephone Conversation/EPA

Participants:

EPA

Joan Shirley  
Elaine Barrick

PGE

Lavinia Wihtol  
George Normine  
Earl Wood  
Dennis Norton

A conference call was set up on February 3, 1988 with representatives of EPA to review the additional information submitted as a result of questions asked during the December 17 1987 conference call. Each of the eleven alleged violations was reviewed based on previous information supplied. In accordance with previous discussions violations 1, 2, 10 and 11 were dismissed. Violations 6 and 8 will result in an assessed penalty of \$3,500 and violations 7 and 9 had the penalty amount reduced to \$2,000.

The main topics of today's discussion were the following violations:

Violation 3

Penalty \$20,000

EPA acknowledged receipt of information including substation logs which indicated that the substations containing PCB transformers had been visited on a quarterly basis. After considerable discussion on how PGE met the intent of the PCB transformer inspection requirements EPA indicated that they had given us as much benefit as they could in this regard. However, they require greater thoroughness in the record that the inspection was done for each transformer for leaks and that no leaks were observed.

Disposition Penalty reduced 50% to \$10,000

Violation 4

Penalty \$20,000

The information submitted on December 28, 1987 substantiated that notification was made to property owners adjacent to PCB transformers.

Disposition    Penalty dismissed

Violation 5

Penalty \$20,000

Information submitted to EPA on December 28, 1987 demonstrated the process the transformer shop goes through in testing for PCB and labeling retrofilled transformers. The information showed that during the PCB inspection all transformers in the shop were less than 50 ppm and therefore application of a non-PCB label was warranted.

Disposition    Penalty dismissed

EPA representatives also indicated that PGE had been very cooperative in providing information concerning PCB handling processes, therefore the penalty was reduced by an additional 15%. The following is the final summary of the PCB violation penalty assessment.

Penalties

Penalty Dismissed

\$13,175

69,875

DMN:slc

c:    Floyd Bechtel  
      John Chapman  
      Rick Hess  
      Walt Higgins  
      Bill June  
      Fred Lamoureaux  
      George Normine  
      Karen Rierson  
      Lavinia Wihtol  
      Earl Wood

es 1409

MEMORANDUM

TO: File  
FROM: *RDH for* Dennis Norton  
DATE: December 28, 1987  
SUBJECT: TSCA Violation Telephone Conversation with EPA

Participants: EPA-Joan Shirley - Legal Counsel  
Elaine Barrick - Case Reviewer  
PGE - Lavinia Wihtol  
George Normine  
Earl Wood  
Dennis Norton.

A conference call was held on December 17, 1987 with representatives of EPA to review the information presented in our November 15, 1987 meeting and the subsequent submittal of information to EPA on December 3, 1987. Each of the alleged violations was reviewed and their current status is as follows:

Violations 1 and Violations 10 Penalty \$1,450

Initially during the review of these violations, EPA stated that they would assess the penalty of \$1,450. EPA was reminded that during our November 13, meeting these two violations were dismissed because of explanations provided at that time. After a review of all violations a break was taken during which EPA further reviewed their notes concerning our November 13 meeting and subsequently agreed to dismiss these violations.

Disposition: Penalty dismissed

Violation 2 Penalty \$200

Disposition: Penalty dismissed

Violation 3 Penalty \$20,000

Substation logs were provided to EPA during a November 13th meeting which demonstrated that the quarterly inspection requirements had been fulfilled. EPA acknowledged that the inspections has been performed and that the information is there but, the information is buried in a log and needs to be

available for easy inspection by EPA. PGE countered that all requirements of 40 CFR 761.30cxi were fulfilled and that the quarterly inspection report is nearly a report PGE has developed to make it easier for EPA to review. We acknowledged that some information was missing from this report. It was suggested that this is a minor recordkeeping violation and that the fine should be reduced accordingly. EPA will review their position concerning the level of fine for this violation.

Disposition: Penalty assessment to be reviewed by EPA

Violation 4

Penalty \$20,000

EPA acknowledged receipt of the PCB transformer notification to Fire Departments and asked if the reclassification of the transformer in the vault at 5th and Taylor had been completed. They were told that the temperature and PCB tests had been completed, however, this information has not been submitted to the Fire Departments. They also asked if notification letters were sent to the adjacent property owners within 30 meters of PCB transformers. We indicated that letters had been sent and they requested a letter stating this. This violation will be dismissed.

Disposition: Penalty to be dismissed after receipt of additional notification letters.

Violation 5

Penalty \$20,000

EPA acknowledged that they understood the information submitted in our December 3, 1987 letter which stated that the only transformers which received non-PCB labels were ones that contained less than 50 ppm PCB before being retrofilled. They reviewed the transformer shop use of non-PCB labels with the inspector. However, he was still of the opinion that PGE was putting non-PCB labels on all transformers that were retrofilled regardless of PCB content. They stated that the inspector was very clear that everything being retrofilled had a non-PCB label put on. PGE stated that this was not the case and that the inspector misunderstood PGE's operation during his inspection. EPA countered that their inspector is extremely reliable and competent and that they would have to go along with the inspectors observation.

EPA also indicated that the inspector noted that PGE did not have a method for accurately tracking the PCB content of the transformers going through the transformer shop. They were told that this was an incorrect observation by the inspector. PGE has a reliable mechanism for tracking transformers. In an effort to reconcile this issue PGE will submit information to EPA concerning the mechanism used to track transformers. We will also send information concerning the PCB content of the transformers in the shop during the inspection. In addition, we stated it was very possible that all transformers in the shop were under 50 ppm since on an annual basis approximately 250 out of 4,800 transformers are PCB contaminated.

Disposition: Additonal information will be sent to EPA.

Violation 6 and 8

Penalty \$3,500

Disposition: Penalty \$3,500

Violations 7 and 9

Penalty \$13,000

Information was submitted to EPA which identified the amount of material in the 8 unmarked 55 gallon drums in the Central Storage Area. Based on this information the penalty will be reduced from \$13,000 to \$2,000.

Disposition: Penalty \$2,000

Violation 11

Penalty \$5,000

The certification of destruction was submitted to the EPA in accordance with their request.

Disposition: Penalty Dismissed

The Following is a summary of the PCB Violation Penalty assessment:

<u>Penalties</u>	<u>Penalty Dismissed</u>	<u>Unresolved</u>
\$5,500	\$37,650	\$40,000

Action Items

Violation 4 - Send EPA a letter indicating that notification to property owners in the vicinity of PCB transformers were notified prior to the 1985 notification date.

File  
December 28, 1987  
Page 4

Violation 5

Send EPA information concerning the transformers that were in the shop during the inspection to demonstrate that these were less than 50 ppm PCB; and to illustrate that PGE has a tracking system capable of following these transformers through the refurbishing process.

cc: Floyd Bechtel  
John Chapman  
Ken Davis  
Rick Hess  
Walt Higgins  
Bill June  
Fred Lamoureaux  
George Normine  
Karen Rierson  
Lavinia Wihtol  
Earl Wood

DMN:slc

ES 1333



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

MAR 28 1988

REPLY TO  
ATTN OF:

S0-125

*John Wakefield  
will handle  
cc are 372  
4-5-88*

Mary Ellen Eckhardt  
Assistant General Counsel  
Legal Department  
Portland General Corporation  
121 S.W. Salmon Street  
Portland, Oregon 97204

Re: Portland General Electric, Docket No. 1087-09-19-2615

Dear Ms. Eckhardt:

Enclosed is a conformed copy of the fully-executed Consent Agreement and Final Order for settlement of the above-referenced matter.

Please note that, while penalty payments are mailed directly to the Pittsburgh, Pennsylvania address in paragraph 13, a copy of the check and transmittal letter must be mailed to the Regional Hearing Clerk here in Seattle at the address in paragraph 14.

The penalty payment of \$13,175 is due thirty (30) days from the date (March 25, 1988) that the Order was signed by the Regional Administrator.

Timely payment of that civil penalty will now bring this matter to a close.

Sincerely,

*Joan C. Shirley*  
Joan C. Shirley  
Assistant Regional Counsel

Enclosure

cc: Hearing Clerk

*George*

*Fred Camarrese # 8500*

*John Chapman # 4675*

*Lewis S. Fortson  
4-4-88*

IN THE MATTER OF:	)	
	)	Docket No. 1087-09-19-2615
PORTLAND GENERAL ELECTRIC,	)	
	)	AGREED ORDER FOR PAYMENT
Respondent.	)	OF CIVIL PENALTIES
	)	

1. This administrative proceeding for the assessment of civil penalties was instituted pursuant to Section 16(a) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2615(a).

2. Informal settlement conferences were held on November 5, November 13, and December 17, 1987, and on February 3, 1988. As a result of those conferences, and other written and oral communications, it was agreed to resolve this matter by executing this Agreed Order.

3. Respondent admits the jurisdictional allegations of the Complaint.

4. Respondent neither admits nor denies the Findings of Fact stipulated in the Agreed Order.

1           5. Respondent neither concedes nor contests the Conclusions of  
2 Law contained in this Agreed Order.

3           6. Respondent explicitly waives the right to request an  
4 adjudicatory hearing on any issue contained in this agreement.

5           7. Respondent consents to the issuance of the Final Order  
6 hereinafter recited.

7  
8                               FINDINGS OF FACT

9           8. On February 4-6, 1987, an EPA inspection was performed at the  
10 facilities of Portland General Electric Company in Portland, Oregon.  
11 Information from that inspection, and information exchanged at the  
12 settlement conferences and in oral and written communications indicates the  
13 following:

14               a. Violation One is dismissed because Respondent has  
15 provided verification that annual reports for 1982, 1983, and 1984 were  
16 accurate as to number of PCB Transformers reported removed and number  
17 remaining in service.

18               b. Violation Two is dismissed because Respondent has  
19 provided verification that the apparent discrepancy in the 1985 annual  
20 report was a transcription error.

21               c. Violation Three is reduced by a half because Respondent  
22 supplied documentation that demonstrated that the required quarterly  
23 inspection reports were only partially deficient.

24               d. Violation Four is dismissed because Respondent provided  
25 documentation verifying compliance with all the required notices.  
26  
27  
28

1 e. Violation Five is dismissed because Respondent provided  
2 documentation to show that it retrofilled but did not reclassify its  
3 transformers.

4 f. Violation Six stands as alleged in the complaint.

5 g. Violation Seven was recalculated based on additional  
6 information supplied regarding the more accurate volume of PCB material  
7 contained in each drum.

8 h. Violation Eight stands as alleged in the complaint.

9 i. Violation Nine was recalculated based on additional  
10 information supplied regarding the more accurate volume of PCB material  
11 contained in each drum.

12 j. Violation Ten is dismissed because Respondent supplied  
13 satisfactory information on the sufficient nature of the containment.

14 k. Violation Eleven is dismissed because Respondent has  
15 provided documentation that the barrels were properly disposed of in  
16 accordance with the applicable regulations.

17  
18 CONCLUSIONS OF LAW

19 9. Based on the foregoing, and pursuant to the authority of TSCA  
20 Section 16(a)(2), 15 U.S.C. § 2615, EPA hereby determines that Respondent  
21 has violated TSCA Section 15, 15 U.S.C. § 2614, and the regulations  
22 promulgated thereunder, and thereby has incurred civil liability to EPA  
23 pursuant to TSCA Section 16, 15 U.S.C. § 2615(a).

24 10. By signature on this Agreed Order, Respondent waives any  
25 right to an appeal of this proceeding.

ORDER

IT IS HEREBY ORDERED and ADJUDGED as follows:

11. In consideration of Respondent's cooperative attitude and consistent with EPA's penalty policy, EPA agrees to mitigate the penalty imposed.

12. Respondent shall pay to EPA the amount of THIRTEEN THOUSAND ONE HUNDRED SEVENTY-FIVE DOLLARS (\$13,175.00) as a civil penalty which is hereby assessed and imposed against it. Payment shall be made within thirty (30) days of the date of this Order.

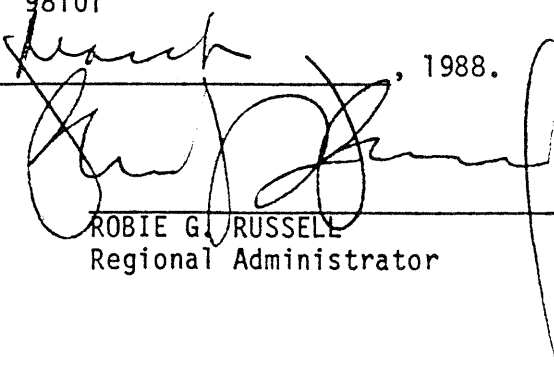
13. Payment of this penalty shall be made by cashier's or certified check or money order payable to the "Treasurer of the United States," and mailed to:

U.S. Environmental Protection Agency  
(Regional Hearing Clerk, Region 10)  
P.O. Box 360903M  
Pittsburgh, Pennsylvania 15251

14. A copy of the check and of the transmittal letter shall be delivered or mailed to the Regional Hearing Clerk at the following address:

Regional Hearing Clerk, Region 10  
Office of Regional Counsel  
U.S. Environmental Protection Agency  
1200 Sixth Avenue, SO-125  
Seattle, Washington 98101

DATED this 25<sup>th</sup> day of March, 1988.

  
ROBIE G. RUSSELL  
Regional Administrator

1 Stipulated, Agreed, and  
2 Approved for Entry,  
Waiving Notice:

PORTLAND GENERAL ELECTRIC

3  
4  
5 Dated: 3/17/88

By: 

WALTER M. HIGGINS  
Vice President, Distribution

U.S. ENVIRONMENTAL PROTECTION AGENCY

6  
7  
8  
9 Dated: March 21, 1988

By: 

JOAN C. SHIRLEY  
Attorney for Complainant